A COMPARATIVE STUDY TO ASSESS THE USAGE OF ELECTRONIC MEDIA AND ITS IMPACT ON THE TRADITIONAL PLAY, HEALTH AND WELLBEING WITH A VIEW TO PROVIDE AN INFORMATION BOOKLET AND NEED-BASED EDUCATION TO THE SCHOOL CHILDREN IN SELECTED SCHOOLS IN THE URBAN AND RURAL AREAS - COIMBATORE

By

NEETHU JOSEPH

A dissertation submitted to **The Tamil Nadu Dr. M G R Medical University,**
Chennai, in partial fulfillment of requirement of the degree of

Master of Science in Nursing

Branch II Child Health Nursing

2016

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Proposal presentation on: 13.11.2014

Approved by Dissertation Committee on: 11. 12 .2015

SUBJECT & RESEARCH GUIDE
Dr. MALARVIZHI. G. M.Sc (N), Ph.D.,
Professor and vice principal,
Head of the department,
Department of child health nursing,
PSG College of nursing,
Coimbatore.

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CERTIFICATE

Certified that **"A Comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas - Coimbatore"** is the bonafide work of **NEETHU JOSEPH**, PSG College of Nursing, Coimbatore, submitted in partial fulfillment of requirement for the degree of Master of Sciences in Nursing to **The Tamil Nadu Dr. M G R Medical University, Chennai.**

Dr. ELIZABETH JEAN ABRAHAM, M.Sc (N), Ph.D.,
Principal,
PSG College of Nursing,
Peelamedu,
Coimbatore-641004

College Seal

PSG COLLEGE OF NURSING

COIMBATORE

2016

ACKNOWLEDGEMENT

“Give thanks to the lord for he has done marvellous things in my life”

Gratitude can never be expressed in words, but this is only a sincere appreciation, which makes words to flow from one’s inner heart.

All honour, praise and thanks to **The Lord Almighty** for his enriched blessing and abundant grace and mercy which encircled me through every step of this work and convert this work into reality and without whom it would never have been possible.

I owe a deep sense of gratitude to the **Managing Trustee** for giving an opportunity to undergo my post graduate nursing career in this prestigious institution and for undertaking this research study.

I express my profound respect and deep gratitude to our beloved Principal **Dr. Elizabeth Jean Abraham, M.Sc (N), Ph.D.,** PSG College of Nursing. The words of appreciation and encouraging support that the principal had shown me, kindled my spirit and enthusiasm to go ahead and accomplish this study successfully.

I extend my heartfelt thanks with sincere gratitude and respect to my guide **Dr.Malarvizhi. G., M.Sc (N), Ph.D.,** HOD of child health nursing, vice principle, PSG College of Nursing. Thank you madam, for your enduring support, timely motivation, expert guidance, perfect direction, valuable suggestions and affection which kept me working towards the completion of my project. Her personal interest, endless patience and love have been the base of this study.

I am immensely pleased in thanking **Mr.M.R.Shivakumar,** Headmaster, PSG Public School, Vedapatti; **Mrs. P. Poongothai,** Principal, GRG Matriculation Higher secondary School, Peelamedu, **Mrs. Sumathi,** Vice-Principal, GRG Matriculation Higher Secondary School, Peelamedu, who granted me the permission to conduct this study in the respective schools and provided all the necessary support.

My special thanks goes to our statisticians **Dr Venugopal, Dr Subramanian, Dr Anil C Mathew** and **Mr.Karthikeyan,** Assistant Professor for their constructive criticisms, valuable guidance, suggestions and motivation which helped me to shape my study.

It gives me a great pleasure to express my sincere gratitude to **Mrs. Glory .H,** Associate Professor, **Mrs. Rajeshwari**, Assistant Professor, **Mrs. Bindhu C. Vasanthi**, Assistant Professor and **Mrs. Lydia Jeeva Jothi**, Assistant Professor for their support, compassion and gentle caring attitude.

I would like to acknowledge **The Entire Faculty and Staff of PSG College of Nursing** for their valuable feedback and motivation throughout the study.

I extend my gratitude to **The Ethical Committee** of PSG institution for their valuable suggestions and approval for the conducting this study.

My sincere gratitude goes to all the **participants** of this study i.e students, teachers and parents who contributed their valuable time for the successful completion of this study.

I express my sincere thanks to all **Library Staffs** for rendering all the facilities and support during the time of this study.

I also deeply appreciate the work of **Mr. Mohan**, Proprietor of cool blue computer browsing centre, who helped me to turn this study into a final product.

I express my heartfelt thanks to all **My Friends**, especially to my batch mates who have been a source of encouragement and support throughout this study.

A few words of hope and encouragement have proven to be a great boon in any accomplishment and this dissertation would have been only a dream, if not for the blessing of my parents **Mr. Joseph John and Mrs. Vimala Joseph;** my in-laws **Mr. T.J. Varghese and Annamma Varghese;** the unlimited support, affection and constant prayers from my beloved husband **Mr. Bevin John Varghese and** my sisters: **Miss. Nidhin Meera Joseph and Miss. Niya Joseph**. Their unwavering faith and confidence in my abilities and in me is what has shaped me to be the person I am today. Thank you for everything.

No words can express my appreciation to many of them whose names have not been mentioned here but have contributed unselfishly and most willingly in the successful completion of this thesis.

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Sl. No	Abbreviations	
1.	BMI	: Body Mass Index
2.	cms	: Centimetres
3.	f	: Frequency
4.	H	: Hypothesis
5.	Hrly	: Hourly
6.	Kgs	: Kilograms
7.	n	: Number of sample
8.	S.D	: Standard deviation
9.	p	: Probability
10.	r	: Karl Pearson Coefficient Correlation

ABSTRACT

A Comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas - Coimbatore.

Twenty first century has witnessed a marked increase in the usage of electronic medias like mobile phones, television, computer and videogames especially among the school children, thereby reducing the exposure to traditional games and transmission of cultural values through the generations. Statistical studies shows that Internet usage in India was 14 lakhs in 1998 and 243 million in 2013. India is now the 3rd largest internet population; There is a controversy existing about the impact of these medias on the development of children in every aspect among the researchers.

Objectives and method of the study:

A descriptive survey design using observation technique and questionnaires was used in this study. The study was conducted in GRG Matriculation Higher Secondary School, Peelamedu and PSG High School, Vedapatti. Simple Random sampling technique was used to identify the 100 samples, for the usage of electronic media, from both the schools. The selected students were given questionnaires and their BMI and vision were checked. Rating scales and opinionnaire were filled by the teachers and the parents of the selected students.

Major Findings and conclusion of the Study:

The rural students 18(36 %) spent 3 hours or more in play activities everyday whereas 16(32%) of the urban students spent only 2 hours in play activities. The popular traditional games played by the urban and rural students were: Hide & seek (96%), Caroms (90%), Police and robber(90%)& Kho- kho (88%) Mobile phones were chosen as the favourite electronic device by majority of the rural 25 (50%) and the urban students 20 (40%). Among the 50 rural and 50 urban students chosen for the study, 46 (92%) of the rural and 44 (88%) of the urban students exhibited optimum performance. This study shows that there is no association between the level of impact of electronic media usage among rural and urban students with the demographic variables such as age, gender, family income, type of family, number of siblings, ordinal position in the family, body mass index and vision.

Key words: Electronic media, Impact, Traditional play, Health and Wellbeing.

CHAPTER-I

INTRODUCTION

1.1 Background of the study

In today's world, electronic media are thoroughly integrated into everyone's life, with television, movies, videos, music, video games and computers central to both work and play. Recent studies indicates that even the youngest children are using a wide variety of screen media, many at higher levels than recommended by the child development Professionals. **(Rideout, Vandewater and Wartella, 2003).**

School-age children need lots of physical activity after a structured school day. Play is the lens through which children experience their world and the world of others. **(Goldstain, 2012).** If deprived of play, children will suffer both in the present and in the long term. Play is essential to development because it contributes to the cognitive, physical, social and emotional well-being of children and youth. It also offers an ideal opportunity for parents to interact with their child. **(Goldstein, 2012).**

Organized sports, athletic activities, arts and crafts, along with opportunities for conversation with friends and caring adults, will help to build self-confidence and encourage social growth. School-age children may need these types of activities before they sit down for long periods to do homework. **(Child Action Handout, No. 13).**

The following are examples of activities enjoyed by school children;

Arts and crafts can include weaving, clay, masks, costumes, puppets, sewing, knitting, jewelry making and other similar activities. School age children may still enjoy the creativity of plain paper, markers, pens or paint to create items such as paper hats, masks, gift-wrapping or original artwork. Games with Rules can include football, tennis, hockey or other favorite sports played outside. Indoor games may include playing cards and board games (caroms, chess, and scrabble). Activities using paper and pencil such as dot-to-dot, crossword puzzles, tic-tac-toe etc. can challenge the mind and build self-esteem. **(Seline Keating, 2011).**

Clubs and Field Trips can include children in one age group or mixed age groups. Clubs can include organized groups like scouts or informal ones. Field trips to park, the beach, a hospital, fire station, farm, post office, and radio or TV stations expose children to the natural environment and the community. **(Seline Keating, 2011).**

Recent researches points to a decline in traditional outdoor games like marbles. These traditional games rarely need equipment. Many can be played almost anywhere, and can cope with a wide range of ages, abilities, and numbers of players; and the rules can be adapted as long as the game is fair. **(Tim Gill, 2011).**

Play, similar to a child, also develops in relation to its contexts namely the physical environment, social ecology and culture. Rather than children growing up on a traditional childhood play like pallanguzhi, kith-kith, hide and seek etc., we can say that children are now growing up in an environment surrounded by electronic media that is a result of the technological innovations over recent decades. As a result, the aspect of childhood which society likes the most, i.e. Innocence, is under threat by the technological growth that the society has actually made itself. **(Seline Keating, 2011).**

Through the multiple components of electronic devices such as television, computer consoles/games, radio and music- ipods /mp4s, internet, mobile phones, media is able to retain substantial amount of influence over people, especially children and the youth. Electronic media, in particular, has become so powerful over recent decades that it has transformed into a master puppeteer, pulling and shaping a child's emotional, cognitive, moral, social and physical development through instilling in a child's mind, what they want them to believe and value. **(Seline Keating, 2011).**

Of the several varying form of electronic media that affect the play and development of children, the most influential media in the 80's and 90's was television. Television; - the so called "Window to the World" brings real life drama, action and happenings into the home of the viewer who can, sitting comfortably and even alone, participate in real life and imagined events without having to stir, talk, share or even explore". Consequently, over recent decades that "magic box", called Television has become one of the main media components that is affecting children's cognitive growth

and development in substantial ways, especially since it is displacing the most distinctive feature and activity of childhood:-Play! **(Seline Keating, 2011).**

According to some researchers, as a child looks at the television screen, the probability of looking away from the television decreases over time. Children are least vulnerable to distraction when engaged in long looks at television. This research led to the theory of attention inertia, which states that the longer a viewer looks at the television screen, the probability of that look continuing increases. **(Anderson, Choi, & Lorch, 1987).**

Family life has undergone a dramatic change with significant and undesirable consequences as a result of television addiction. In addition, peer groups have become television-orientated with the majority of children's time spent together playing, being displaced by television. Culture and religion, in general, too, has been transformed by television. Similar to the traditional family ritual at mealtime, the ritual of bed-time is also evaporating. The actual time children go to bed at is regularly being determined by the scheduling of particular television programmes. With the emergence of television channels devoted to just children programmes, such as *The Disney Channel* and *Nickelodeon*, it is often a struggle for parents to get their children to bed when their child's programs are still being aired. **(Seline Keating, 2011)**

The elimination of opportunities to talk, and perhaps more important, to argue, to present grievances, between parents and children and brothers and sisters is being lost. Consequently, television and other electronic medias can be employed as an avoidance mechanism, used frequently to avoid confronting family problems, problems that will not go away if they are ignored but that will only escalate to become less easily resolvable as time goes on. **(Seline Keating, 2011).**

Internet and television use among children has become entwined in other ways as well. A recent study suggests that 36% of children between the ages of 2 and 11 use both media simultaneously. Altogether, children between the ages of 8 and 10 spend about 5.5 hours each day using media-eight hours, if you count the additional media consumed while multitasking **(Nielsen, 2010).** According to a recent study conducted in Puducherry

in 2011, Internet penetration was found in nearly 24% of the students in the study population; however, there is a wide disparity in internet use in terms of age group, gender, and geographic location in the study population. **(JIPMER, 2011).**

Children's popularity in school and peer acceptance is often determined by sharing attitudes, activities and interests with peers. Knowledge of television programs along with owning the unlimited merchandise that comes with them like schoolbags and pencil-cases, excels a child into the desired popular group. Similarly, a child's ownership of the newest electronic gadget like latest mobile phones and the games that are popular are also ways in which present primary school children mix, get accepted by peers and earn popularity. **(M. E Schmidt, 2005).**

Inorder to ensure healthy media use among children, it is important to understand how parents make decisions about their children's media use, so that effective interventions can be designed where appropriate. Anticipatory guidance and child-healthy advice about media use provided can function as a "tipping point" to encourage parents to think carefully about the media their children consume **(M. E Schmidt, 2005).**

Statistical studies shows that Internet usage in India was 14 lakhs (1998) and 243 million in 2013. India is now the 3rd largest internet population; 1st being the Americans and 2nd being the Chinese. In mobile usage, there are 220 million Indian users and we are the 2nd largest user of mobile in the world. **(DOCOMO, 2011).**

Studies about social media usage shows that there are 100 million facebook users in India out of which more than 80% access it via mobile phones. Statistics on videogame users shows that an average American will spend around 10,000 hours in gaming by the time he/she turns twenty one. In India, Gaming Industry has grown around 16% by 2014. (i.e 227 million dollars spent on Gaming). **(DOCOMO, 2011).**

1.2 Need for the study

The literature works shows a substantial, though frequently inconclusive body of work about the negative impact of technology on child development. Whether from the point of view of exposure to inappropriate content or the effects of technology use on

health or lifestyle, a substantial body of research places technology in a negative, determinist fashion. According to the American Psychiatric Association, the one predominant finding in research on the mass media is that the exposure to media portrayals of violence increases aggressive behavior in children. **(Crawford, 2013).**

A related study on the prevalence of internet addiction and its association with psychopathology in 987 Indian children concluded that (68.9%) were girls and (31.1%) were boys. Moderate users constituted about 74.5% and 0.7% were addicts. The addicted children had complaints of anxiety, depression and anxiety- depression. **(Goel D, Subramanyam A, Kamath R, 2013)**

Some of the negative impact of electronic media usage on health are obesity, poor vision, headache, fatigue and tiredness, and mental health problems. There is a controversy existing about the effects of media on children-beneficial or otherwise. Moreover there are very few Indian studies available about the impact of electronic media on the traditional play and health and well-being of school children. Therefore, this study aims to find the extent of usage of electronic media among school children and its impact on the traditional play and health and well- being among school children in both the urban and the rural areas.

1.3 Statement of the problem:

A Comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas - Coimbatore.

1.4 Objectives:

1. To assess the usage of electronic media (mobile phones, computers, video games & television) among school children.
2. To compare the usage of electronic media among school children in the urban and rural areas.
3. To assess the impact of electronic medias on the traditional play, health and wellbeing of school children in the selected rural and urban schools.

4. To determine the association between selected demographic variables and the impact of electronic media on the traditional play and health and well being of the school children.
5. To correlate the impact of electronic media and the academic performance of students in the selected rural and urban schools.

1.5 Assumptions:

1. School children have more interest towards the use of electronic medias.
2. The usage of electronic medias are more among urban population.
3. Electronic medias can influence the traditional play and health of school children.
4. The electronic medias may have a negative effect on the health and behavior of school children.
5. The information booklet for parents and teachers will help them to guide their children to use the electronic media judicially.

1.6 Hypothesis:

H_1: There will be a significant difference in the usage of electronic media and its adverse effects between the school children in the urban and the rural areas.

H_2: There will be a statistically significant association between the demographic variables and the impact of electronic media on the traditional play and health and well being of the school children in the rural and urban areas.

1.7 Delimitations:

1. The study is delimited to the school children belonging to the 6^{th} to 9^{th} standards aged 10-14 yrs.
2. The study is delimited to children without any sensory problems.
3. The study is delimited to children who use electronic media such as television, computer, videogames, and mobile phones.

1.8 Operational definition:

Electronic media:

It refers to any type of electronic device like television, computers, video games and mobile phones which are accessible to the school children.

Impact:

It refers to the extent to which the electronic medias affect the traditional play health and wellbeing of school children as measured by the self-structured questionnaire, BMI and vision using Snellen chart.

Traditional play:

They are informal games, most often played by children without the use of electronic medias for relaxation and entertainment. eg. hide and seek, chasing, chess, caroms etc.

Information booklet:

A small booklet giving information to the school children, their parents and the teachers about the advantages and disadvantages of using electronic media and the health problems related to electronic media addiction and its prevention.

Health and well being:

It refers to the assessment of the selected school children aged 10 yrs to 14 yrs, in terms of BMI and vision and through self-structured questionnaire on the physical activities and academic performance as recalled by the students, teachers and the parents.

Need-based education:

Education provided to the school children on proper usage of electronic media most commonly used by them, to prevent addiction and adverse effects on their health and academic performance.

School children:

It refers to the school-going children between the age of 10-14 yrs studying in 6th standard to 9th standard) in selected urban and rural schools of Coimbatore.

1.9 Projected outcome:

1. The provision of need-based education to the school children will create an awareness about the importance of judicial use of electronic media.
2. The use of an information booklet by the parents and teachers about the impact of electronic media on the health of their children will help to prevent media addiction.

1.10 Conceptual framework

Modified Pender's Health Promotional Model:

A framework is an abstract, logical structure of meaning that guides the development of the study and enables the research to link findings to the body of knowledge. It is the background or foundation of the study where the concepts are related in a logical manner by the researcher. The conceptual framework for this study is derived from Pender's health promotion model.

Pender's health promotion model is proposed by Nola .J. Pender in 1982 and revised in 1996 and later in 2002. This model describes the multi- dimensional talent of persons as they interact within the environment. It is directed at increasing the health promoting behavior. Health promoting behavior should result in enhanced functional ability of the nurses which will lead to improved health promoting actions.

The major concepts of the health promotion model

- Individual characteristics and experiences.
- Behavior specific cognition and affect.
- Behavioral outcomes.

Individual characteristics and experiences: The person has unique personal characteristics and experiences that affect subsequent actions.

In this study, it includes the student's personal factors such as age, gender, class, body-mass index, vision and socio-cultural factors such as family income per month, type of family, number of siblings and ordinal position in the family.

Behavior specific cognition and affect: The components of behavior specific cognition are;

- Perceived efficacy
- Activity related affect
- Perceived barrier

Perceived efficacy: Persons have capacity for reflective self awareness about their knowledge level. Perceived self efficacy to execute a given behavior increases the likelihood of commitment to actions and actual performance of behavior. Greater self efficacy results in fewer perceived barriers in a specific health behavior.

In this study, the perceived efficacy is creating awareness about the impact of electronic media on traditional play, health and well being of school children's.

Activity related affect: It is the subjective positive or negative feeling that occurs before during and following the behavior based on the stimulate properties of the behavior itself. The more subjective feeling, the greater self efficacy increased efficacy can generate further positive affect.

In this study, the student attends the need- based education to bring about a positive affect of electronic media usage.

Perceived barrier of action: Perceived barriers are anticipated, imagined or real blocks and personal costs of understanding a given behavior.

In this study, the perceived barriers of action are sensory health problems and unwilling students.

Behavioral outcome: A good self efficacy and activity related affect leads to implementation of health promoting behavior. The final outcome is the personal fulfillment to lead a health promoting behavior.

Through this study, the health promoting behavior will be increased in students by attending the need based education and the information booklet.

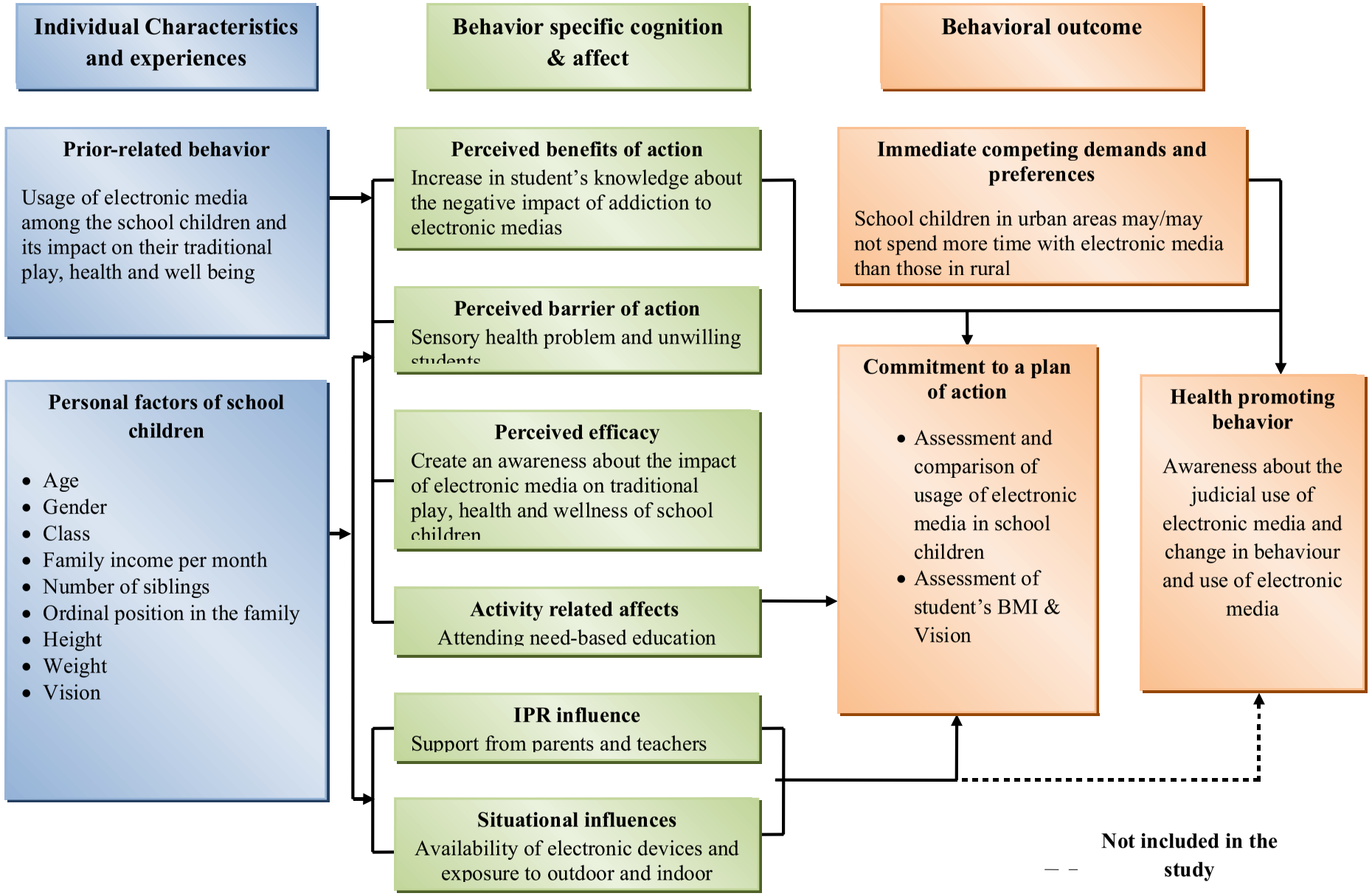

Fig 1.1 Modified Conceptual framework based on Pender's health promotional model (2002)

CHAPTER-II

REVIEW OF LITERATURE

Review of literature is an essential step in the development of a research. It enables the researcher to develop insight into the study and plan for methodology. Further, it provides the basis for further investigations, justifies the need for implications, throws light on the feasibility of the study and indicate constraints of data collection. A literature review is an evaluative report of studies found in the literature related to selected area.The review should describe, summarize, evaluate and clarify the literature.It should give a theoretical basis for the research and help to determine the nature of research. The related review of literatures relevant to this study has been organized under the following sections;

2.1 Literature related to the play activities among school children.

2.2 Literature related to the usage of mobile phones among school children.

2.3 Literature related to the usage of television among school children.

2.4 Literature related to the usage of computer and videogames among school children.

2.1 Literature related to the play activities among school children.

Children's play is often referred to as something to do when not working or something to occupy children and 'keep them off the streets'. Play is the lens through which children experience their world and the world of others.

A recent study called the Eden Project conducted a survey research among 2000 parents which revealed that 43 % of children in the south west haven't had a picnic outside of their own garden, and just under half have never been on a bike ride with their

the south west worry about whether their children are experiencing enough of the traditional childhood activities. **(Peter Stewart, 2015)**

2.2 Literature related to the usage of mobile phones among school children.

According to a recent study conducted among the Indian children, the mobile phone ownership rate was 57%, peak age of ownership was 15 years, 80% make more than 6 calls per day. The internet usage through mobile was 18%. The number of social networking and blogging was 70%. (21% compared to other nationalities- following Egypt, Japan & Paraguay). Less than 50% of families put restrictions on mobile-phone use. **(DOCOMO, 2011)**

A survey was done in 41 Australian primary schools and 25 High schools in cities, regional centers and country towns all over New South Wales in a sample size of 1411 student's i.e 767 from year 6 and 644 from year 9 were surveyed. Among the 9^{th} standard students, 94% owned a mobile phone, while 57% of the 6^{th} standard students owned one. **(Damien Spry, 2007)**

2.3 Literature related to the usage of television among school children.

A cross sectional observational study was conducted on television viewing habits and their effects among high school children in the urban field practice area of Mamata med. College, Khammam among 450 students which concluded that 12.6% had headache, 11.5% had eye strain, 1.8% were overweight and 0.4% had neck pain. Nearly 75% of these children were missing one or the other daily activities due to television viewing. About 10.8% had sleep disturbances too. **(Raghotham Reddy, Shashidhar .B, 2011)**

A survey on the influence of television on children and adolescents in the urban

A survey done to determine the amount of television viewing and computer use in urban school aged children, and to examine their associations with sleep/wake patterns, duration of sleep and sleep disorders among students representing eight Chinese cities with a sample size of 19,299 students showed that 49.7% were boys and 50.3% were girls. A parent administered questionnaire and a Chinese version of the Children's sleep habit's questionnaire were used and it concluded that a TV or computer was present in the bedroom of 18.5% and 18.3% of Chinese school-aged children respectively. They were associated with atleast 2 types of sleep disorders. Television viewing more or equal to 2 hrs/ day on weekends, with a prevalence of 48.8%, was the predominant risk factor for all sleep disorders. Computer had no correlation with any sleep disorder. **(Shenghui et.al, 2005)**

A cross sectional study was conducted on television viewing and its association with overweight in Colombian children aged 5 to 12 years by which showed that the prevalence of overweight (obesity inclusive) in this population was 11.1%. Children who were classified as excessive television viewers (between two and 3.9 hours/day or 4 or more hours/day) were more likely to be overweight than children who reported to watch television less than 2 hours/day. **(L.F.Gomez, et al., 2005)**

2.4 Literature related to the usage of computer and videogames among school children.

A cross sectional study was conducted on harmful effects of commonly used electronic devices on adolescents and its safeguard at Shebin El-Kom, Egypt among 59 boys and 67 girls between 16 and 18 yrs. Play and Technology questionnaire for older children and an interview questionnaire for younger children were used. The results showed that the adolescents were exposed to moderate to severe health hazards which lead to lack of concentration affecting their school performance. The vast majority of

Carpal tunnel syndrome, itchy eyes and affected their school performance (69%). **(Dr. Nawa A. Zein El Dein, 2013)**

A cross sectional study was done on the prevalence of Internet addiction and its association with psychopathology in Indian adolescents with a sample size of 987 students of various facilities in Mumbai using a semi-structured performa and the Internet addiction test, self- administered by students. Dukes Health Profile was used to study physical and psychosocial quality of life of students. Subjects were classified into moderate users, possible addicts, and addicts for comparison. The results showed that, out of the 987 students who participated in the study, 681(68.9%) were girls and 306(31.1%) were boys.74.5% were moderate users and 0.7% were addicts. Those with excessive use of internet had high scores on anxiety, depression and anxiety depression. **(Goel D, Subramanyam A, Kamath R, 2013)**

An exploratory study was carried out in three schools from urban areas and two schools from rural areas of Puducherry among VI to IXth standard students (n = 421) . Purposive sampling technique was used and a structured self-administered questionnaire was developed. This sought information on socio-demographic details (age, gender, standard of education, occupation of father, and type of school), use of internet, and place of accessing internet, hours of use, and reasons for use. The study concluded that the use of internet was significantly higher among boys (30.9%) $p<0.05$, students from urban areas (39%) and from government schools (26.3%). **(JIPMER, 2011)**

A study was conducted by The department of Psychology, Iowa State University and National Institute on Media and the Family, Minneapolis, USA, that gathered information about video-gaming habits and parental involvement in gaming, to determine the percentage of youth who meet clinical-style criteria for pathological gaming. A randomly selected sample of 1,178 American youth ages 8 to 18 were used for this study.

A population-based cross-sectional survey of middle school students (grades 5–8) in the North-eastern United States on association between TV, movie and videogame exposure among 4508 students where gender was equally represented, and 95% were white, the results showed that the odds of poorer school performance increased with increasing weekday television screen time and cable movie channel availability and decreased with parental restriction of television content restriction. As compared with children whose parents never allowed them to watch R-rated movies, children who watched R-rated movies once in a while, sometimes, or all of the time had significantly increased incidence of poorer school performance. **(Sharif, et al., 2006)**

SUMMARY:

Literatures related to play and usage of electronic medias such as mobile phones, television, computer and videogames among school children helped to identify the need for controlled use of these medias among school children. These studies laid the foundation for the present study which assessed and compared the usage of electronic media among school children and its impact on traditional play, health and well being. Survey studies were reviewed for the present study. These studies gave an idea on assessment of usage of electronic medias and play activities of school children. In short, current literatures states that too much use of electronic devices can negatively affect the play activities, health and well being of school children.

CHAPTER-III

METHODOLOGY

Research design is the framework for addressing a research question including strategies for enhancing the study's integrity (Polit, 2008). The present study was conducted to assess the usage of electronic media among the school children and its effect on their traditional play, health and well-being. This study was conducted by adopting the following steps of research process viz. research design, setting, population and sampling, sample size determination, criteria for selection of samples, instruments and tools for measuring variables, techniques of data collection, and method of data analysis and report of pilot study.

3.1 Research Approach

The research approach used for this study was quantitative evaluative approach.

Research Design:

A descriptive survey design using observation technique and questionnaires was used in this study to explore the usage of electronic media by the school students and the impact of these medias on the traditional play, health and well-being.

3.2 Variables of the study

3.2.1 Independent Variable:

The independent variable in this study is the usage of electronic media.

3.2.2 Dependent variable:

The dependent variable in this study is the impact of electronic media usage on traditional play, health and well being of school children in the urban and rural areas.

headed by the Principal. The school admits around 1350 co-ed students each year. Classes 6-9 has a strength of around 500 students. The school has all the urban school facilities and excels in both the academic as well as the co-curricular activities.

2. PSG High School, Vedapatti.

It was established in the year 1901 in the Vedapatti area of Perur Block of Coimbatore district. The school is approved for its upper primary, secondary and senior secondary education and working under the management of private unaided organization of PSG Sons and Charities. The primary medium of instruction is Tamil and is a co-ed school being run under the guidance of the Headmaster. It has around 200 students in classes 6 to 9 and has all the basic facilities for high school education.

3.4 Population and sampling:

School children belonging to 6^{th}, 7^{th}, 8^{th} & 9^{th} standards (both male and female) in a rural and an urban school.

3.4.1 Sample size and Sampling technique:

Simple Random sampling technique was used for the study. All the children who met the inclusion criteria were selected by lottery method. The teachers were asked to select the roll numbers of the students from the shuffled lots.

Calculation of the sample size: Degree of Precision method was used to determine the sample size.

$$n=\frac{4pq}{L^2}$$

(50 Students from the urban and 50 from the rural area, equally distributed among each class)

Sampling Technique:

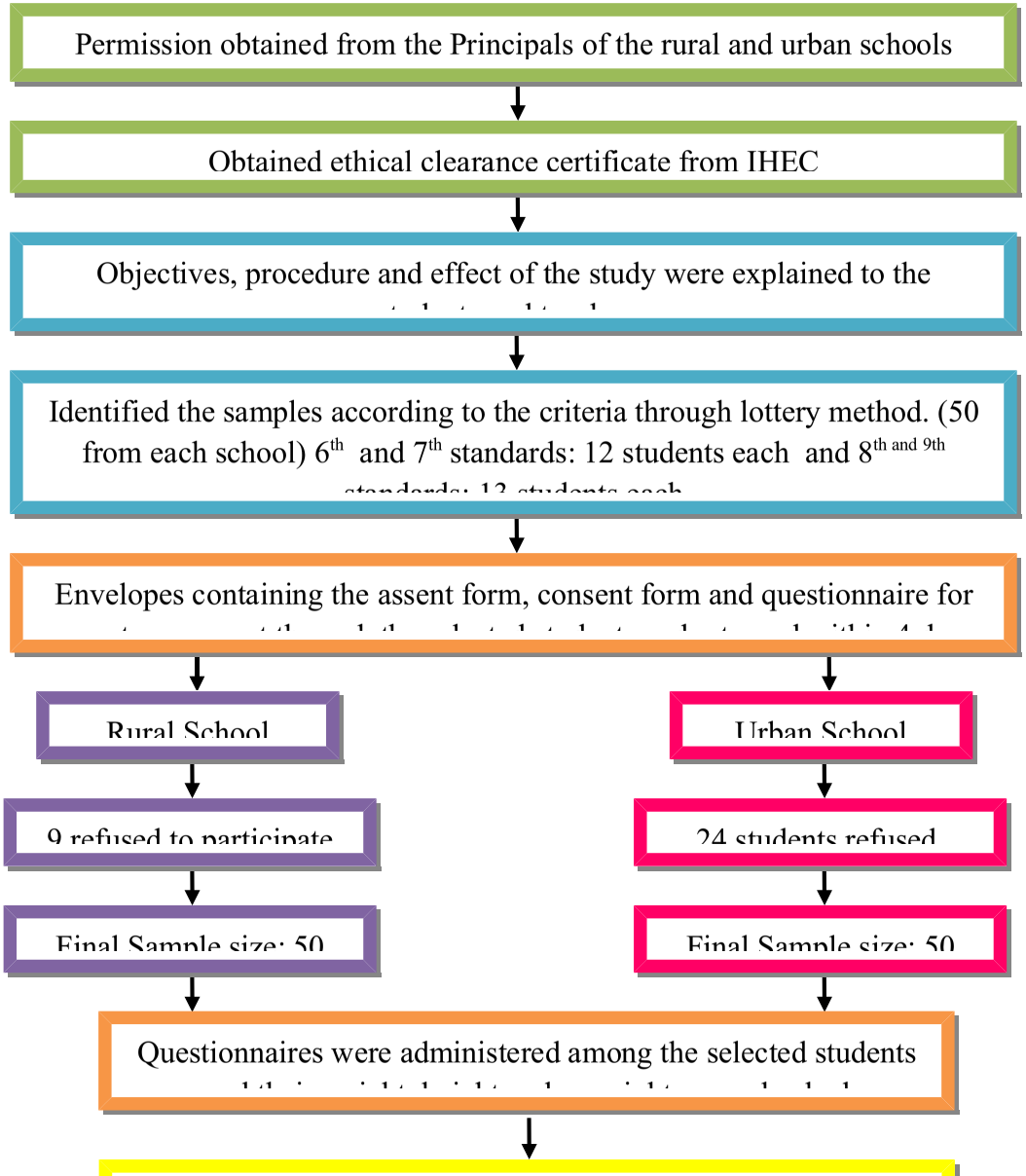

Figure 3.1: Schematic representation of sampling technique

3.4.2 Criteria for the selection of samples:

Inclusion criteria:

- School students belonging to 6^{th}, 7^{th}, 8^{th} & 9^{th} standards from urban and rural areas.
- Children aged 10yrs to 14 yrs.
- Both boys and girls.
- Students who have and use electronic devices at home.
- Students who can read and write Tamil or English.
- Parents of the students participating in the study.
- Teachers who are willing to participate in the study.

Exclusion criteria:

- Students with any sensory health problems such as blindness or hearing impairment.

3.5 Instrument and tool for data collection:

A Self-Structured questionnaire developed by the researcher and expert guidance was used to check the usage of electronic media among the school age children and to gather information about the behavior of the students observed by their teachers and the parents.

Section A: It consists of baseline data or Demographic variables such as age, gender, family income per month, type of family, number of siblings, ordinal position in the family, BMI, and vision. (Annexure IV)

Section B: Data related to the daily activities of the school children including play activities at home and school, traditional games played , electronic devices used, time spend in each activity etc. (23 questions in section B: section A & B were filled by the students). (Annexure IV)

Section C: Three Point Rating scale with options as 'Always, Sometimes and Never' to assess the well being of students during school hours such as participating in the school sports activities, paying attention in the class, co-operative or troublemaker child etc. (contains 13 questions , done by the teachers). (Annexure IV)

Scoring and Interpretation: For each question, maximum score given was 3 and minimum score as 1. Reverse scoring given for questions 9-13.

(a) 29-39 : Optimum Performance
(b) 20-28 : Moderate Performance
(c) 13-19 : Minimum Performance

Section D: Questionnaire containing 11questions to assess the well being of School children in the family. (Annexure IV)

Section E: Three Point Rating scale with options as 'Always, Sometimes and Never' to assess the well-being of school children in the family such as time spent with the child, socializing habits of the child, child's behavior at home etc. (contains 13 questions). Reverse scoring given for questions 8-13. (Annexure IV)

(a) 29-39 : Optimum Well-being
(b) 20-28 : Moderate Well-being
(c) 13-19 : Minimum Well-being

Section F: Three Point rating scale with options as 'Always, Sometimes and Never' to obtain Parents Opinion to assess the impact of electronic media on the health and well being of school children such as the positive and negative effects of using electronic devices. (contains 13 questions; Section D, E, & F done by the parents of the selected students). Reverse scoring given for questions 8-13. (Annexure IV)

(a) 29-39 :Optimum Positive Impact
(b) 20-28 :Moderate Positive Impact

Devices used for the study:

1. Calibrated Weighing scale (in kgs, Phoenix, Eagle-flat: 160kgs) and a measuring tape (in cms) were used to measure the weight and height for calculating Body Mass Index.
2. Snellen Chart (Tumbling E-chart) to check the vision was used.

3.5.1 Validity and Reliability of the tool

Validity of the tool was determined by giving the developed tool to the nursing and medical experts from different fields, along with the objectives of the study. The experts were requested to give their opinion, clarity and appropriateness as well as the suggestions for the modification of the tool.

Reliability of the tool of the rating scales was identified using Split-half method. It was computed using Spearman Brown Correlation Coefficient Method. The reliability of the rating scales section C, E and F were found to be 0.92, 0.85 and 0.74 respectively. The tool was found to be reliable and feasible.

Weight scale calibration was done by the biomedical department for checking the accuracy of weight. This was done every 6 months. The same weighing scale was used throughout the study and it was giving consistent values.

3.5.2 Technique of data collection:

Students who met the criteria were selected for the study. Main study was conducted for 3 weeks at PSG High School, Vedapatty and 3 weeks at GRG Matriculation Higher Secondary School, Peelamedu from 29th June 2015 to 8th August 2015. Demographic data was collected by distribution of the Self-administered questionnaire (English and Tamil tools) directly from the students and teachers who

3.5.3 Data collection procedure:

Permission was obtained from the Institutional Human Ethics Committee (IHEC), (Annexure II), the Head Master of PSG High school, Vedapatty and the Principal of GRG Matriculation School, Peelamedu. (Annexure I).Data collection was done for 6 weeks.

Steps in data collection:

1. Got the permission from the respective schools.
2. Objectives, procedure and effect of the study were explained to the students and teachers.
3. Identified the samples according to the criteria.
4. Envelopes containing the assent form, consent form (Annexure III) and questionnaire for parents were sent through the selected students.
5. After obtaining the consents and filled questionnaires from parents, questionnaires were administered among the selected students and their weight, height and eye sight were checked.
6. Rating scales were given to the teachers and collected back the next day.
7. A need- based education using power-point on the Impact of mobile phone usage on the students was given.

3.6 Ethical approval:

The study was approved in its presented form by the Institutional Human Ethics Committee (IHEC) on February 27, 2015. Data collection was done after obtaining this permission. (Annexure II)

3.7 Report of the pilot study:

The pilot study was conducted among the 7th standard students of PSG High School, Vedapatty (Rural School) from 3rd June 2015 to 5th June 2015 and GRG Matriculation and Higher Secondary School, Peelamedu (Urban School) from 8th June

There was a significant difference in the performance level of rural and urban students with average use of electronic devices. The average use of electronic medias have a positive impact on the health and well being of rural students than the urban students who spend more time with electronic devices.

There was a significant association of level of impact of electronic media with the demographic variables such as gender, family income per month, number of siblings, Ordinal position in the family, Weight and BMI among the Rural school students.

There was a significant association of level of impact of electronic media with the demographic variables such as age, family income per month, type of family, number of siblings, Weight, BMI and vision among the Urban school students.

3.8 Changes brought after the pilot study:

No significant changes were recommended after the conduction and analysis of the pilot study.

3.9 Data analysis plan:

The data will be analyzed by using descriptive and inferential statistics.

- Mean and Standard deviation will be used for descriptive statistics.
- Independent 't' test to compare the level of student performance, well being and impact of electronic media on the rural and urban students.
- Chi-square test will be used to find the association between the demographic variables and the impact of electronic media on the traditional play and health and wellbeing of the school children.
- Karl Pearsons's Coefficient Correlation will be used to find the correlation between the usage of electronic media and its impact on the traditional play, health and well being of the school children.

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

Analysis is a process of organizing the data in such a way that research question can be answered. It includes the synthesis of research data and the testing of research hypothesis using those data. Interpretation is the process of making some of the result and of examining the implication of the finding within a broader content. **(Polit and Beck, 2008)**

This chapter deals with the analysis and interpretation of data collected from the rural and urban school students, and their parents and teachers on the usage of electronic media and its impact on the traditional play, health and well being. The data was collected from 50 rural school students and 50 urban school students, their teachers and parents. The data was compiled, and analyzed and then tested for their significance through statistical analysis.

This chapter is organized under the following sections.

Section 1:

4.1 Frequency and percentage distribution of demographic variables of students at rural and urban school. (contd..)
4.2 Frequency and percentage distribution of demographic variables of students at rural and urban school.
4.3 Frequency and percentage distribution of play activities of students at rural school and urban school. (contd..)
4.4 Frequency and percentage distribution of play activities of students at rural school and urban school.
4.5 Frequency and percentage distribution of level of student's academic performance in rural school and urban school.
4.6 Frequency and percentage distribution of wellbeing of children in the family.
4.7 Frequency and percentage distribution of level of wellbeing of rural and urban students in their families.
4.8 Frequency and percentage distribution of level of impact of electronic media on students in rural school and urban school.

Section 2:

4.9 Comparison of level of student performance between students of rural school and urban school.

4.10 Comparison of level of wellbeing in school between students of rural and urban school.

4.11 Comparison of level of impact of electronic media between students of rural and urban school.

Section 3:

4.12 Correlation between impact of electronic media and student performance scores among students in rural and urban school.

4.13 Correlation between impact of electronic media and wellbeing scores among students in rural and urban school.

Section 4:

4.14 Association of level of impact of electronic media among the rural school students with the demographic variables.

4.15 Association of level of impact of electronic media among the urban school students with the demographic variables.

Table 4.1: Frequency and percentage distribution of demographic variables of students at rural school and urban school

n = 100

Demographic Variables	Rural School n=50		Urban School n=50	
	f	%	f	%
Age in years				
11	15	30.0	12	24.0
12	13	26.0	21	42.0
13	10	20.0	8	16.0
14	12	24.0	9	18.0
Gender				
Male	27	54.0	28	56.0
Female	23	46.0	22	44.0
Family income per month				
5,000 - 10,000	46	92.0	12	24.0
10,001 - 15,000	1	2.0	10	20.0
15,001 - 20,000	3	6.0	6	12.0
20,001 & above	0	0.0	22	44.0
Type of family				
Nuclear family	41	82.0	38	76.0
Joint family	5	10.0	12	24.0
Extended family	4	8.0	0	0.0
Number of siblings				
1	35	70.0	30	60.0
2	10	20.0	7	14.0
3 or more	3	6.0	1	2.0
None	2	4.0	12	24.0

Table 4.1 shows that among the 50 rural students, most of the children belonged to age group of 11 years,15 (30%) and 21 (42%) in the age group of 12 years among the urban school students. The number of male children were almost equal 27 (54%) in the rural school and 28 (56%) in the urban school.

The average family income was comparatively lower in rural students 46(92%), Rs.5000- 10,000 as compared to urban school students 22(44%).Among the 100 students, majority of the rural students 41 (82%) and 38(76%) of the urban school students belonged to nuclear families. Most of the rural students, 35 (70%) and the urban students 30 (60%) had one sibling in their family.

Table 4.2: Frequency and percentage distribution of demographic variables of students at rural school and urban school

n = 100

Demographic Variables	Rural School n=50		Urban School n=50	
	f	%	f	%
Ordinal position in the family				
First	18	36.0	31	62.0
Second	27	54.0	15	30.0
Third	3	6.0	3	6.0
Fourth or more	2	4.0	1	2.0
Height				
130 - 140 cms	12	24.0	8	16.0
140.1 - 150 cms	24	48.0	19	38.0
150.1 - 160 cms	12	24.0	17	34.0
160.1 - 170 cms	2	4.0	6	12.0
Weight				
25 – 30	13	26.0	11	22.0
30 – 35	14	28.0	10	20.0
35 – 40	9	18.0	10	20.0
40 – 45	12	24.0	10	20.0
45 – 50	2	4.0	9	18.0
50 and above	4	8.0	4	8.0
BMI				
Underweight	37	74.0	29	58.0
Healthy	11	22.0	20	40.0
Overweight	2	4.0	1	2.0
Vision				
Normal	39	78.0	40	80.0
Reduced	11	22.0	9	18.0
Poor	0	0.0	1	2.0

Table 4.2 shows that 27 (54%) of the rural students were the second born in their family whereas 31 (62%) of the urban students were the first born in their family. An average height ranged from 140.1- 150.0 cms in the rural students 24 (48%) and the urban students 19(38%) respectively.

Out of the 100 students, 14 (28%) of the rural school students weighed between 30-35 kgs and 11 (22%) of the urban students between 25-30 kgs. The majority of the rural 37 (74%) and 29(58%) urban students were underweight. Majority of the rural and

the urban students had normal vision i.e 39(78%) and 40 (80%) respectively only 1 (2%) of the urban students had poor vision.

Table 4.3: Frequency and percentage distribution of play activities of students at rural school and urban school

n = 100

Play activities of students	Rural School n=50		Urban School n=50	
	f	%	f	%
How much time do you spent in play activities everyday?				
30 min	4	8	7	14
1 hour	11	22	15	30
2 hours	17	34	16	32
3 hours or more	18	36	12	24
Which type of play are you interested in?				
Outdoor	40	80	38	76
Indoor	10	20	12	24
What kind of play activity are you interested?				
Playing alone	2	4	4	8
Group play	48	96	46	92
Which of the following traditional games do you play?				
Hide and seek	43	86	48	96
Kite-flying	22	44	42	84
Police and robber	32	64	45	90
Pallanguzhi	26	52	41	82
Kho-Kho	36	72	44	88
Gilli-Danda	17	34	38	76
Kith Kith	15	30	37	74
Carrom	39	78	45	90
Thaayam	29	58	41	82
Hrs / week				
1 – 3 hrs	27	54	9	18
3 – 7 hrs	15	30	8	16
5 – 7 hrs	4	8	7	14
≥7 hrs	4	8	26	52

Contd…

Play activities of students	Rural School n=50		Urban School n=50	
	f	%	f	%
Which is your most favourite game / sport?				
Hide and seek	3	6	1	2
Thaayam	1	2	-	-
Carrom	4	8	4	8
Chess	2	4	6	12
Cricket	10	20	10	20
Basketball	-	-	5	10
Cycling	-	-	1	2
Volleyball	8	16	2	4
Kho-Kho	6	12	-	-
Race	1	2	1	2
Throwball	4	8	7	14
Football	3	6	4	8
Tennis	-	-	-	-
Badminton	-	-	5	10
Archery	-	-	1	2
Kabadi	4	8	1	2
Skipping	2	4	-	-
Kith kith	2	4	1	2
Do you participate in sports activities at school?				
Yes	42	84	40	80
No	8	16	10	20
Type: Athletics	11	22	9	18
Sports	31	62	33	66
How many hours per day do you spend in play at school every day?				
None	-	-	3	6
Less than 1hr	40	80	43	86
2 hrs	9	18	4	8
3 hrs or more	1	2	-	-
How many hours per day do you spend in play at home?				
None	2	4	3	6
1 hour	25	50	29	58
2 hrs	17	34	12	24
3 hrs or more	6	12	6	12

Contd…

Table 4.3 shows that, almost 18 (36 %) spent 3 hours or more in play activities everyday whereas 16 (32%) of the urban students spent 2 hours in play activities. Majority of the rural 40 (80%) and urban students 38 (76%) were interested in outdoor activities than indoor activities as well as 48 (96%) of the rural and 46(92%) of the urban students liked group play activities than playing alone.

The popular traditional games played by the rural students were, Hide & seek 43 (86%), Carrom 39 (78%), Kho-kho 36 (72%) and Police and robber 32 (64%). The other traditional games like kite–flying, Pallanguzhi, Gilli-danda, Kith-kith and Thaayam constituted a smaller percentage of the games played by the rural students.

The popular traditional games played by the urban students were: Hide & seek 48 (96%), Carrom 45 (90%), Police and robber 45 (90%), Kho-kho 44 (88%) and kite-flying 42 (84%). The other traditional games like Pallanguzhi, Gilli-danda, Kith-kith and Thaayam constituted a smaller percentage of the games played by the urban students.

More than half of the rural students 27 (54%) spent 1-3 hours per week in playing traditional games whereas 26 (52%) of the urban students spent more than 7 hours per week playing traditional games. Cricket was voted as the most favourite game of both the rural 10 (20%) and the urban students 10 (20%). Majority of the rural students 42(84%) and the urban students 40 (80%) stated that they participated in sports activities conducted by the school, preferably sports than athletics.

Less than 1 hour was permitted for play at both the rural 40 (80%) and the urban schools 43 (86%). One hour was spent at home for play by the rural 25 (50%) and the urban students 29 (58%).

Table 4.4: Frequency and percentage distribution of play activities of students at rural school and urban school

n = 100

Play activities of students	Rural School (n=50)		Urban School (n=50)	
	f	%	f	%
Which among the following electronic devices do you use?				
Television	40	80	37	74
Computer	30	60	34	68
Mobiles	32	64	35	70
Play Station (video games)	16	32	25	50
Which device do you use the most?				
Television	17	34	16	32
Computer	6	12	7	14
Mobiles	25	50	20	40
Play Station (video games)	2	4	7	14
How much time do you spent on your favourite electronic device?				
1 hour	32	64	33	66
2 hrs	6	12	8	16
3 hrs	7	14	2	4
3 hrs or more	5	10	7	14
How many hours do you spend infront of television every day?				
30 mins	14	28	20	40
1 hour	20	40	16	32
2 hrs	10	20	11	22
3 hrs or more	6	12	3	6
How many hours do you use a computer every day?				
None	13	26	12	24
Less than hour	30	60	26	52
2 hrs	3	6	8	16
3 hrs or more	4	8	4	8

Contd…

Play activities of students	Rural School n=50		Urban School n=50	
	f	%	f	%
How often do you use a mobile?				
Everyday	19	38	19	38
Alternative day	17	34	15	30
>3 times / Week	5	10	11	22
No time constraints	9	18	5	10
How often do you use a Play station/videogame?				
Once a week	17	34	8	16
Twice a week	11	22	12	24

Play activities of students	Rural School n=50		Urban School n=50	
	f	%	f	%
No time constraints	7	14	6	12
Not using	15	30	24	48
Do you have a computer/ television in your bed-room?				
Yes	30	60	15	30
No	20	40	35	70
How many hours do you sleep at night?				
Less than 7 hours	6	12	12	24
7- 8 hours	20	40	22	44
More than 8 hours	24	48	16	32
Do you have any electronic device available at school?				
Yes	45	90	46	92
No	5	10	4	8
What is the purpose of using your favourite electronic device?				
Academic	21	42	24	48
Social networking	6	12	7	14
Games	28	56	22	44
Does using electronic devices help you in your studies or games?				
Yes	35	70	46	92
No	15	30	4	8
Studies	18	36	32	64
Games	23	46	17	34

Contd…

Play activities of students	Rural School n=50		Urban School n=50	
	f	%	f	%
How do you spend your weekends?				
Play	34	68	31	62
Tour	6	12	6	12
Television	5	10	4	8
Study	6	12	5	10
Help parent	1	2	-	-
Music Class	-	-	1	2
Videogames	-	-	4	8
Do you have any hobbies or other leisure time activities?				
Yes	35	70	42	84
No	15	30	8	16
Activities:				
Television	5	10	1	2
Play	17	34	-	-
Drawing	6	12	19	38

Play activities of students	Rural School n=50		Urban School n=50	
	f	%	f	%
Cooking	1	2	1	2
Coin collection	1	2	3	6
Reading	4	8	13	26
Music	2	4	1	2
Craft	-	-	7	14
Videogames	-	-	5	10
Writing	-	-	2	4
Dancing	-	-	6	12
Do you help your parents in household activities?				
Yes	49	98	49	98
No	1	2	1	2

As shown in Table 4.4 mobile phones were chosen as the most favourite electronic device by most of the rural 25(50%) and the urban students 20(40%). Most of them spent around 30 minutes to 1 hour infront of the television and less than one hour infront of the computer. Mobiles were used every day by the rural students and the urban students 19(38%).

Among the rural students, 17(34%) used play station or video game once a week and the urban students 12(24%) twice a week, although most of the urban students claimed that they do not use videogames 24 (48%).

In this study, it was found that due to the lack of space in the house, most of the rural students had a television/computer in their bedroom 30(60%) whereas the urban students didn't have any device in bedroom 35(70%).

Among the 100 students chosen for this study, 24(48%) of the rural students slept more than 8 hours, whereas most of the urban students slept only 7-8 hours. The rural students claimed that the main purpose for using their favourite electronic device was for games 28 (56%), whereas the urban students used them for academic purposes 24 (48%), although a similar use was found for gaming too 22(44%).

The rural students stated that these electronic devices helped them in games 23 (46%), while the urban students said that it helped them in studies 32 (64%). Both the rural 34 (68%) and the urban students 31 (62%) spent their weekends in playing than other activities such as studying, watching television, gaming or helping parents.

In this study, it was found that 35(70%) of the rural students and 42 (84%) of the urban students had hobbies or leisure-time activities like playing, drawing, cooking, coin collection, reading, watching television, listening to music, gaming, craft works, writing and dancing. The urban students had more hobbies than the rural students. Almost all the rural and the urban students claimed that they helped their parents in household chores 49 (98%) respectively.

Table 4.5: Frequency and percentage distribution of level of student's academic performance in rural school and urban school

n = 100

Student Performance	Minimum Well-being (13 – 19)		Moderate Well-being (20 – 28)		Optimum Well-Being (29 – 39)	
	f	%	f	%	f	%
Rural School (n=50)	0	0	4	8.0	46	92.0
Urban School (n=50)	0	0	6	12.0	44	88.0

Table 4.5 shows that among the 100 students chosen for the study, 46(92%) of the rural and 44(88%) of the urban students exhibited optimum performance, while 4(8%) of the rural and 6(12%) of the urban students exhibited moderate level of performance.

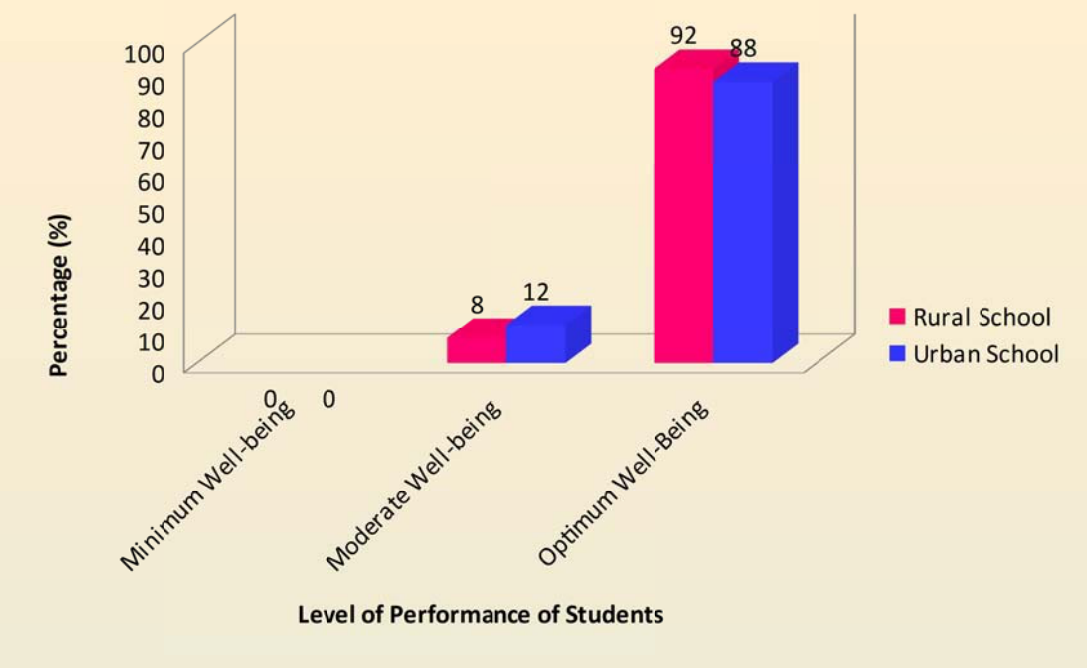

Figure 4.1 Frequency and percentage distribution of level of student's academic performance in rural school and urban school

Table 4.6: Frequency and percentage distribution of well-being of children in the family

n = 100

Well-being of the children in the family	Rural School n=50		Urban School n=50	
	f	%	f	%
How many hours do you allow your child to spend in outdoor activities everyday?				
None	11	22.00	7	14.00
Less than 1 hour	24	48.00	18	36.00
2 hours	14	28.00	24	48.00
3 hours or more	1	2.00	1	2.00
Have you taught your child any traditional games such as hide and seek, kite flying, Pallanguzhi, Kho-Kho, Gilli-danda etc.				
Yes	35	70.00	39	78.00
No	15	30.00	11	22.00
Do you play with your child?				
Yes	38	76.00	40	80.00
No	12	24.00	10	20.00
Do you feel that the present generation is very different from the older generations in aspects such as traditional play and health?				
Yes	36	72.00	41	82.00
No	14	28.00	9	18.00
How much time do you permit your child to watch t.v or use other electronic devices every day?				
30 min	14	28.00	16	32.00
1 hour	22	44.00	26	52.00
2 hours	12	24.00	5	10.00
3 hours or more	2	4.00	3	6.00
Do you monitor the content of the program your child is watching on T.V or Computer?				
Yes	34	68.00	37	74.00
No	16	32.00	13	26.00
Does your child have a favourite play?				
Yes	28	56.00	26	52.00
No	22	44.00	24	48.00
Do you allow your child to watch television before going to bed?				
Yes	18	36.00	19	38.00
No	32	64.00	31	62.00
Do you send your child for any coaching classes or other activities such as learning music, dance, karate etc.?				
Yes	12	24.00	23	46.00
No	38	76.00	27	54.00
Do you feel that the traditional games have been replaced by the electronic				

Well-being of the children in the family	Rural School n=50		Urban School n=50	
	f	%	f	%
devices?				
Yes	31	62.00	34	68.00
No	19	38.00	16	32.00

Table 4.6 shows that 24parents (48%) of the rural school children allow their children to spend less than 1 hour in outdoor activities everyday whereas 24 parents (48%) of the urban children allowed 2 hours of outdoor activities every day.

Almost 35 (70%) of the rural parents and 39 (78%) of the urban parents taught their children some of the traditional games such as hide & seek, Pallankuzhi, Kho kho, Gilli Danda, etc and 38 (76%) of the rural parents and 40 (80%) of the urban parents found time to play with their children. Majority of the rural parents 36 (72%) and 41 (82%) of urban parents feel that the present generation is very different from old generation in aspects such as traditional play and health.

The rural parents 22(44%) and urban parents 26 (52%) permits their children to watch TV or electronic device for one hour every day. Most of the rural parents 40 (80%) and 37 (74%) of the urban parents monitored the contents of the TV or the computer program although 32 (64%) of the rural parents and 31 (62%) of the urban parents allowed their children to watch TV before going to bed. Most of the rural parents and the urban parents feel that the traditional games have been replaced by the electronic devices i.e. 31 (62%) and 31 (62%) respectively.

Table 4.7: Frequency and percentage distribution of level of well-being of rural and urban students in their families (Parental rating)

n = 100

Well-Being in the families	Minimum Well-being (13 – 19)		Moderate Well-being (20 – 28)		Optimum Well-Being (29 – 39)	
	f	%	f	%	f	%
Rural School (n=50)	1	2.0	33	66.0	16	32.0
Urban School (n=50)	0	0	28	56.0	22	44.0

Table 4.7 shows that among the 100 students chosen for the study 16 (32%) of the rural students and 22(44%) of the urban students exhibited optimum wellbeing while 33(66%) of the rural and 28(56%) exhibited moderate well being.

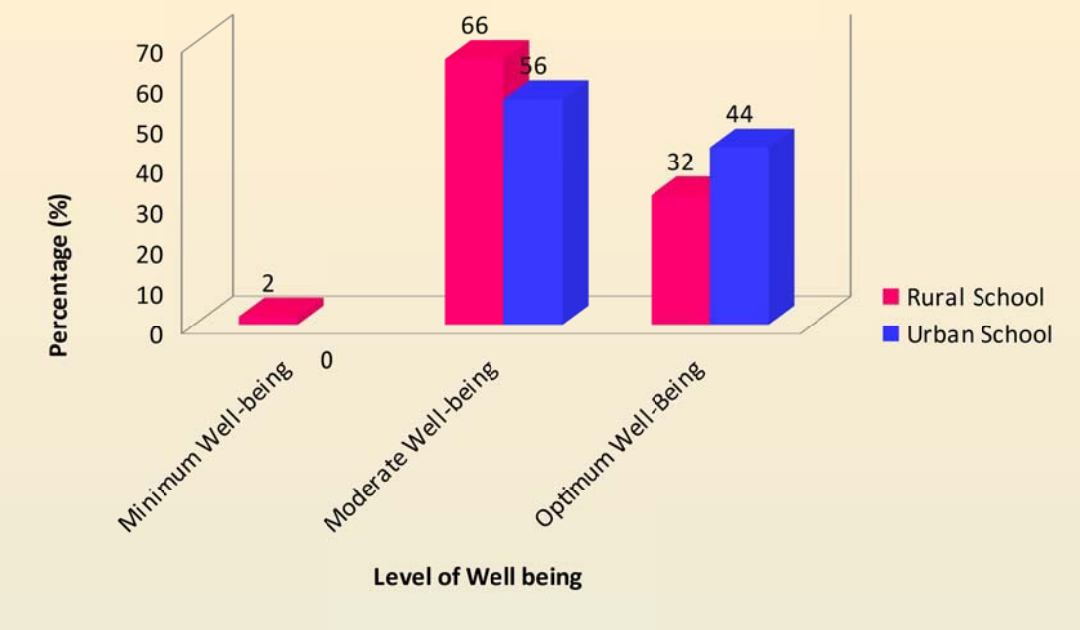

Figure 4.2 Frequency and percentage distribution of level of wellbeing of rural and urban students in their families

Table 4.8: Frequency and percentage distribution of level of impact of electronic media on students in rural school and urban school (Parental rating)

n = 100

Impact of Electronic Media	Minimum positive impact (13 – 19)		Moderate positive impact (20 – 28)		Optimum positive impact (29 – 39)	
	f	%	f	%	f	%
Rural School (n=50)	1	2.0	27	54.0	22	44.0
Urban School (n=50)	1	2.0	24	48.0	25	50.0

Table 4.8 shows that the majority of the rural students 27 (54%) had moderate positive impact and 25 (50%) of the urban students had optimum positive impact of electronic media usage.

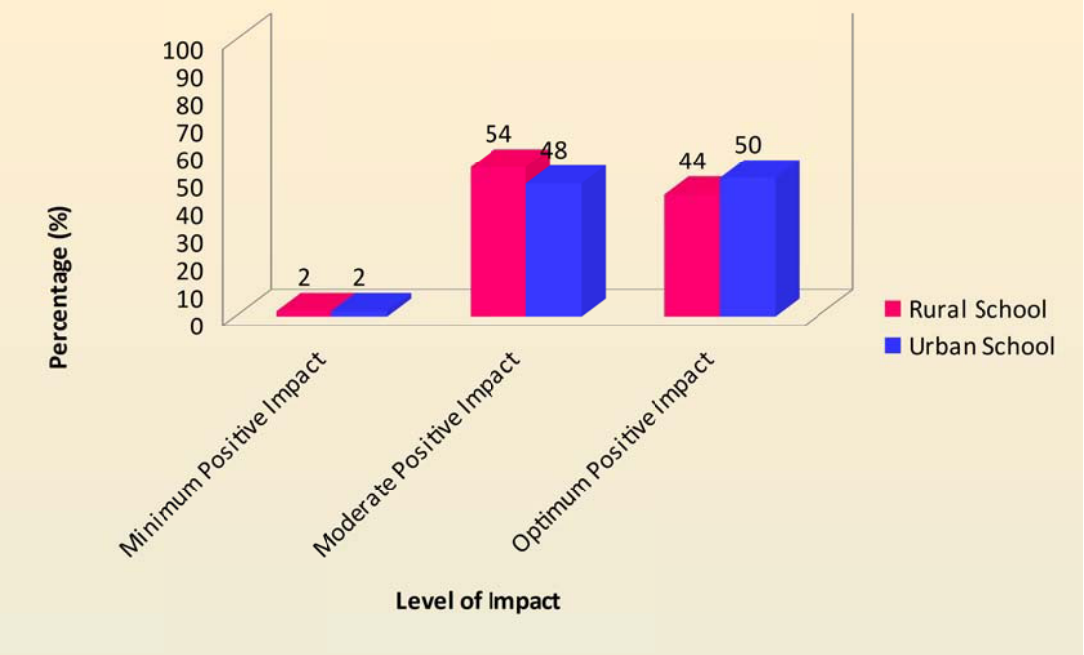

Figure 4.3 Frequency and percentage distribution of level of impact of electronic media on students in rural and urban schools

Table 4.9: Comparison of level of student performance between students of rural school and urban school

n = 100

Student Performance	Mean and S.D	't' value	Table value
Rural School (n=50)	33.50 ± 3.90	0.494 (NS)	0.622
Urban School (n=50)	33.88 ± 3.78		

Table 4.9 shows that rural students had a mean performance of 33.50 ± 3.90, whereas the urban students showed a mean performance of 33.88 ± 3.78. This table indicates that there is no significant difference in the performance level of the rural and urban students.

Table 4.10: Comparison of level of well-being in school between students of rural and urban schools

n = 100

Student Performance	Mean and S.D	't' value	Table value
Rural School (n=50)	27.12 ± 3.35	0.995 *	0.322
Urban School (n=50)	27.86 ± 4.05		

Note: Statistically Significant- *p<0.05

Table 4.10 shows that the mean level of well being of rural students was 27.12 whereas that of urban students was 27.86. The result shows that there is a significant difference in the level of well being of rural and urban students.

Table 4.11: Comparison of level of impact of electronic media between students of rural and urban schools

n = 100

Student Performance	Mean and S.D	't' value	Table value
Rural School (n=50)	28.40 ± 4.28	0.118 (NS)	0.906
Urban School (n=50)	28.50 ± 4.18		

Note: NS– Not Significant

Table 4.11 shows that the mean level of impact of electronic media usage among rural students was found to be 28.40 ±4.28, whereas that of the urban students was 28.50 ± 4.18. The result verifies that there is no significant difference between the level of impact of electronic media usage among students of rural and urban schools, thereby indicating that H_1 hypothesis is rejected.

Table 4.12: Correlation between impact of electronic media and student performance scores among students in rural and urban schools

n = 100

Impact of Electronic Media	Mean and S.D	'r' Value	'p' value
Rural School (n=50)		0.202*	0.159
Impact	28.40 ± 4.28		
Student Performance	33.50 ± 3.90		
Urban School (n=50)		0.072 (NS)	0.619
Impact	28.50 ± 4.18		
Student Performance	33.88 ± 3.78		

Note: Statistically Significant *p<0.05 NS-Not Significant

Table 4.12 shows that there is a weak positive correlation between the impact of electronic media usage and students performance scores among the rural students whereas there is no correlation for the same among the urban students.

Table 4.13: Correlation between impact of electronic media and well-being scores among students in rural and urban schools

n = 100

Impact of Electronic Media	Mean and S.D	'r' Value	'p' value
Rural School (n=50)		0.407*	0.003
Impact	28.40 ± 4.28		
Well-being	27.12 ± 3.35		
Urban School (n=50)		0.716**	0.00001
Impact	28.50 ± 4.18		
Well-being	27.86 ± 4.05		

Note: statistically significant - **p<0.001, *p<0.05 ; NS-Not Significant

Table 4.13 shows that there is a correlation between impact of electronic media and well being scores among the rural and the urban students. This shows that an average use of electronic media has a positive impact on the well being of the students.

Table 4.14: Association of level of impact of electronic media among the rural school students with the demographic variables

n = 50

Demographic Variables	Minimum positive impact (13 – 19)		Moderate positive impact (20 – 28)		Optimum positive impact (29 – 39)		d.f	χ^2	Table value	'p' Value
	f	%	f	%	f	%				
Age										
11	0	0	9	18.0	6	12.0	3	2.056 (NS)	7.815	0.561
12	0	0	9	18.0	4	8.0				
13	0	0	4	8.0	6	12.0				
14	1	2.0	6	12.0	5	10.0				
Gender										
Male	0	0	16	32.0	11	22.0	1	0.420 (NS)	3.841	0.517
Female	1	2.0	11	22.0	11	22.0				
Family income per month										
5,000 - 10,000	1	2.0	25	50.0	20	40.0	-	-	-	-
10,001 - 15,000	0	0	1	2.0	0	0				
15,001 - 20,000	0	0	1	2.0	2	4.0				
20,001 & above	0	0	0	0	0	0				
Type of family										
Nuclear family	1	2.0	21	42.0	19	38.0	2	0.798 (NS)	5.991	0.671
Joint family	0	0	3	6.0	2	4.0				
Extended family	0	0	3	6.0	1	2.0				
Number of siblings							-	-	-	-

Demographic Variables	Minimum positive impact (13 – 19)		Moderate positive impact (20 – 28)		Optimum positive impact (29 – 39)		d.f	χ^2	Table value	'p' Value
	f	%	f	%	f	%				
1	1	2.0	18	36.0	16	32.0				
2	0	0	6	12.0	4	8.0				
3 or more	0	0	1	2.0	2	4.0				
None	0	0	2	4.0	0	0				
Ordinal position in the family										
First	0	0	14	28.0	4	8.0	-	-	-	-
Second	1	2.0	12	24.0	14	28.0				
Third	0	0	1	2.0	2	4.0				
Fourth or more	0	0	0	0	2	4.0				
BMI										
Underweight	0	0	23	46	14	28	-	-	-	-
Healthy	0	0	3	6	8	16				
Overweight	1	2	1	2	0	0				
Vision										
Normal	1	2	19	38	19	38	-	-	-	-
Reduced	0	0	8	16	3	6				
Poor	0	0	0	0	0	0				

Note: NS – Significant

Table 4.14 shows that there is no association between the level of impact of electronic media usage among rural students with the demographic variables such as age, gender, family income, type of family, number of siblings, ordinal position in the family, body mass index and vision.

Table 4.15: Association of level of impact of electronic media among urban school students with the demographic variables

n = 50

Demographic Variables	Moderate positive impact (20 – 28)		Optimum positive impact (29 – 39)		d.f	χ^2	Table value	'p' Value
	F	%	f	%				
Age in years								
11	5	10.0	7	14.0	3	1.814 (NS)	7.815	0.612
12	10	20.0	10	20.0				
13	3	6.0	5	10.0				
14	6	12.0	3	6.0				
Gender								
Male	14	28.0	14	28.0	1	0.027 (NS)	3.841	0.869
Female	10	20.0	11	22.0				
Family income per month								
5,000 - 10,000	8	16.0	4	8.0	3	3.708 (NS)	7.815	0.295
10,001 - 15,000	3	6.0	6	12.0				
15,001 - 20,000	4	8.0	2	4.0				
20,001 & above	9	18.0	13	26.0				
Type of family								
Nuclear family	18	36.0	19	38.0	-	-	-	-
Joint family	6	12.0	6	12.0				
Extended family	0	0	0	0				
Number of siblings								
1	16	32.0	13	26.0	-	-	-	-
2	3	6.0	4	8.0				
3 or more	1	2.0	0	0				
None	4	8.0	8	16.0				
Ordinal position in the family								
First	14	28.0	16	32.0	-	-	-	-
Second	6	12.0	9	18.0				
Third	3	6.0	0	0				
Fourth or more	1	2.0	0	0				
BMI								
Underweight	16	32	13	26	-	-	-	-
Healthy	8	16	11	22				
Overweight	0	0	1	2				
Vision					-	-	-	-

Demographic Variables	Moderate positive impact (20 – 28)		Optimum positive impact (29 – 39)		d.f	χ^2	Table value	'p' Value
	F	%	f	%				
Normal	16	32	23	46				
Reduced	7	14	2	4				
Poor	1	2	0	0				

Note: N S – Not Significant,

Table 4.15 shows that there is no association between the level of the impact of electronic media usage and demographic variables such as age, gender, family income, type of family, number of siblings, ordinal position in the family, body mass index and vision.

CHAPTER V

RESULTS AND DISCUSSION

This chapter presents the major findings and discuss them in relation to similar studies conducted by other researchers. The aim of the study was to assess and compare the usage of electronic media among school children in the rural and urban schools and its impact on their traditional play, health and wellbeing. In the recent years, traditional play has been replaced by the electronic media and children are suffering from the ill effects of electronic media addiction both health wise and academically. The researcher has found that an average or judicial use of electronic media has a positive effect on the wellbeing of the students. The most commonly used electronic device among school children is the mobile phones. Majority of the students' academic performance is not affected by the use of electronic media.

5.1 Baseline Information on the usage of electronic media among school children:

The current study shows that most of the rural 35(70%) and urban students 30(60%) were an only child to their parents. A similar random national survey of 527 parents of children living at home and between ages 2 and 17 in the US showed that one quarter of the sample (24.9%) were families with only one child. The results indicated that families with more than one child participates in more alternative activities to screen media than do families with only one child. **(Davies and Gentile, 2012)**

In the present study, mobile phones were chosen as the most favourite electronic device by majority of the rural 25(50%) and the urban students 20(40%).Mobile phones were used every day by the rural students and the urban students 19(38%). In a similar study conducted among 1411 Australian children, 94% from 9^{th} standard and 57% from 6^{th} standard owned a mobile phone. **(Damien Spry, 2007)**

A similar study among the Indian children revealed that the mobile ownership among children is 57%.Eight percent of them make more than 6 calls per day. The internet usage through mobile is 18%. **(DOCOMO, 2011).**

In this study, it was found that 34(68%) of the rural parents and 37(74%) of the urban parents monitored the content of the TV or the computer programmes watched by their children. In a similar study, 113 of the 132 parents stated that they monitor and supervise their child's television viewing. **(Seline Keating, 2009)**

5.2 Impact of electronic media on the traditional play:

In this study, 31(62%) of the rural parents and 34(68%) of the urban parents feel that the traditional games have been replaced by the electronic devices. These findings corresponds to a study conducted among 2000 parents in England in which 38% claimed that they had a go at kite-flying and 60% said their children would rather stay at home, either playing computer games, watching TV alone or with friends or even just reading a book alone. As a result, 63% of the parents in the south west worry about whether their children are experiencing enough of the traditional childhood activities. **(Peter Stewart, 2015)**

Yet another study conducted among 161 school children, 46 teachers and 132 parents, 35 teachers agreed that the school playground is influenced by television and computer consoles rather than traditional childhood games and other play activities. **(Seline Keating, 2009)**

5.3 Impact of electronic media on the health and wellbeing of school children:

In the present study, male participants constituted about 27(54.0%) and 28(56.0%) in the rural and urban schools whereas female participants were 23(46%) and 22(44%) respectively. A related study on the prevalence of internet addiction and its association with psychopathology in 987 Indian children concluded that (68.9%) were girls and (31.1%) were boys.74.5% were moderate users and 0.7% were addicts. The addicted children had complaints of anxiety, depression and anxiety- depression. **(Goel D, Subramanyam A, Kamath R, 2013)**

This study shows that majority of the rural students 24(48%) spent more than 8 hrs in sleep whereas the urban students 22(44%) had 7-8 hrs sleep. A corresponding research study on impact of media use on sleep disorders among 19,299 school- aged children in China found that media use were positively correlated with later bed times,

later awakening times, and a shorter duration of sleep during the week days. **(Lis Jinx, 2007)**

A population-based cross-sectional survey of 4508 students in grades 5–8 in the United States on association between TV, movie and videogame exposure showed that the odds of poorer school performance increased with increasing weekday television screen time and cable movie channel availability and decreased with parental restriction of television content restriction. Children who watched R-rated movies once in a while, sometimes, or all of the time had significantly increased incidence of poorer school performance. **(Sharif, et al., 2006)**

The present study shows that majority of the rural 37(74%) and urban students 29(58.0%) were underweight. Contrary to this, another study showed a significant association between electronic game use and obesity, with nearly a 2-fold increased risk of obesity for every hour spent playing electronic games daily. **(Stettler .N, et al., 2004)**

The results of the present study shows that there is no significant correlation between the impact of electronic media usage and student's performance among the rural and urban school children. It also shows that an average use of electronic media has a positive impact on the wellbeing of the students. A related research study concluded that 68% of 8-18 yrs old have a television in their room. In 63% of the households, using television is usually during meals and also leads to behaviour problems like aggressive behaviour, eating disorder, sleep disturbance, attention problems, increased high risk behaviour and also affects school behaviour. **(Gins Bearer, 2003)**

A similar study found that the importance of thinness and trying to look like women on television, in movies or in magazines were predictive of young girls (9 to 14 years old) beginning to purge at least monthly. Yet another prospective study this same group found that both boys and girls (aged 9 to 14 years old) who were making an effort to look like the figures in the media, were more likely than their peers to develop weight concerns and become constant dieters**. (Field, et al., 2001)**

An experimental study found strong evidence of a causal link between TV viewing and children being overweight. **(Robinson, 2001)** A similar study reported that each additional hour of TV viewing per week increased the risk of obesity by 2%. **(Dietz and Gortmaker, 1985)**

CHAPTER-VI

SUMMARY AND CONCLUSION

The present study was conducted to assess and compare the usage of electronic media among school children in the rural and urban areas and its impact on the traditional play, health and wellbeing. Relevant literatures were reviewed to enrich the knowledge on the selected phenomena and to develop a framework and research plan. The main objective is to assess the impact of electronic media on the traditional play, health and wellbeing of school children in the selected rural and urban schools.

The research design used in this study was descriptive research method. The study was conducted at PSG High School, Vedapatty and GRG Matriculation Higher Secondary School, Peelamedu. The sampling technique used in this study was Simple random sampling technique. Using Precision method, the sample size was calculated as 100.i.e 50 from the rural school and 50 from the urban school. According to the selection criteria, the students were selected for the study. Self- structured questionnaire was used for this study. The data was collected after the approval of the Ethical committee from 29th June 2015 to 8th August 2015.

Demographic data and Questionnaires were filled by the students during the school hours and rating scale by the teachers. Questionnaire and rating scale for parents were sent through the students and filled and returned within 4 days. Both descriptive and inferential statistics were used to analyse the obtained data. Chi- square test was used to find the association between the demographic variables and the impact of electronic media on the traditional play, health and wellbeing of the school children. Karl Pearson Coefficient Correlation was used to find the correlation between the usage of electronic media on the traditional play, health and wellbeing of the school children.

6.1 Major Findings of the Study:

- Less than half of the rural students18 (36 %) spent 3 hours or more in play activities everyday and 16 (32%) of the urban students spent only 2 hours in play activities.

- Majority of the urban and rural students played Hide & seek 48 (96%), Caroms 45 (90%), Police and robber 45 (90%), Kho- kho 44 (88%) and kite-flying 42 (84%).
- Less than 1 hour was permitted for play at both the rural 40 (80%) and the urban schools 43 (86%). One hour was spent at home for play by the rural 25 (50%) and the urban students 29 (58%).
- Mobile phones were chosen as the favourite electronic device by most of the rural 25 (50%) and the urban students 20 (40%).Majority of them spent around 30 minutes to 1 hour infront of the television and less than one hour infront of the computer. Mobiles were used every day by the rural students and the urban students.
- A lesser percentage of 23 (46%) rural students stated that these electronic devices helped them in games while the urban students claimed that it helped them in studies 32 (64%).
- Among the 100 students chosen for the study, 46 (92%) of the rural and 44 (88%) of the urban students exhibited optimum performance, while 4 (8%) of the rural and 6 (12%) of the urban students exhibited moderate level of performance.
- More than half of the rural students 27 (54%) had moderate positive impact and 25 (50%) of the urban students had optimum positive impact of electronic media usage.
- There is no significant difference in the performance level or the level of impact of electronic media usage on the students but the well being of the rural and urban students shows a significant difference.
- This study shows that there is a weak positive correlation between the impact of electronic media usage and students performance scores among the rural and the urban students.
- The results confirms that an average use of electronic media has a positive impact on the well being of the students.
- There is no association between the level of impact of electronic media usage among rural and urban students with the demographic variables such as age, gender, family income, type of family, number of siblings, ordinal position in the family, body mass index and vision.

6.2 Conclusion:

This study shows that the traditional games have been replaced by the electronic media. Although the students are engaged more in the electronic media, its judicial use has a positive impact on the wellbeing of the students. Demographic variables such as age, gender, type of family and family income does not affect the usage of electronic media among the school children. Parental control, support from the teachers and awareness among students about the impact of electronic media on health are equally important for preventing media addiction and inculcating the cultural values through the traditional games, thereby promoting positive health and wellbeing among school children.

6.3 Nursing Implications:

Nurses play a crucial role in maintaining age-appropriate growth and development among the school children. They help the parents in maintaining good health and performance of the children. The present study has implications in nursing practice, nursing education, nursing administration and nursing research.

6.3.1 Nursing Practice:

- Nurses in the clinical and community areas have a crucial role in observing the usage of electronic media among the school children.
- Nurses must involve in teaching the children and their parents about the importance of traditional games in transmitting the cultural values and beliefs to the younger generation.
- Nurses must educate the school children and their parents regarding the impact of electronic media on their health and academic performance.

6.3.2 Nursing Education:

- Nursing curriculum should include awareness education about the impact of usage of electronic media on the health and wellbeing of the students.

6.3.3 Nursing Administration:

- Opportunity should be given to the Nursing staff to assess the usage of electronic media among the hospitalised children and use it judiciously as a divertional therapy.
- Nurses should provide education to the parents and children about the ill effects of addiction of electronic media thus preventing health problems like insomnia, obesity, diminished vision, headache etc.

6.3.4 Nursing Research:

- Research can be conducted on the effect of play on the Growth and Development of children and its impact on their relationships.
- Similar comparative studies can be performed among other age groups as well.

6.4 Limitations:

- The consent was not given by all the parents of the initially chosen samples. Therefore, new samples had to be repeatedly chosen to fulfill the required sample size.
- The findings were based on reports and data filled by the parents and teachers.

6.5 Recommendations:

- The study can be conducted in a larger group of population.
- A similar study can be conducted among other age groups such as adolescents and preschoolers.
- A similar study related to the usage of electronic media as a diversion therapy among children during hospitalization can also be conducted.

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ANNEXURE-I

PSG COLLEGE OF NURSING
(An ISO 9001 : 2008 Certified Institution)
AVINASHI ROAD, PEELAMEDU, COIMBATORE 641 004, TAMILNADU, INDIA
Phone : 91 - 422 - 4345862, 2570170 (7 Lines), Grams : "CHARITY"
Fax : 91-422-2594400 • Website : www.psgnursing.ac.in • Email : principal@psgnursing.ac.in

Ref.No: CN/181/14

Date: 18.12.2014

To

The Principal
GRG Matriculation Higher Secondary School
Peelamedu
Coimbatore.

Sir,

This is to inform you that Mrs. Neethu Joseph, I year M.Sc nursing student studying in PSG College of Nursing, Coimbatore is planning to conduct a study on **"A Comparitive Study to Assess the usage of Electronic Media and its Impact on the Traditional Play, Health and Wellbeing with a View to Provide an Information Booklet and Need - Based Education to the School Children in Selected Schools in the Urban & Rural Areas, Coimbatore"** as part of her research work.

Kindly grant her permission for conducting Pilot & Main study in your School. We assure you that the study will be conducted without disturbing the routine activities of the School.

Thanking you,

PROF.ELIZABETH JEAN ABRAHAM
PRINCIPAL

PSG COLLEGE OF NURSING Peelamedu COIMBATORE-4

PRINCIPAL
GRG. MAT. HR. SEC. SCHOOL.
PEELAMEDU, COIMBATORE TN - 641 004

PSG HIGH SCHOOL

VEDAPATTI * COIMBATORE - 641 007. Phone : 0422 2476782

L. GOPALAKRISHNAN
PRESIDENT

N.C. NANDAGOPALAN
SECRETARY

M.R. SHIVA KUMAR
HEADMASTER

Date 11.02.2015

To

The Vice-Principal, (Research Co-ordinator and Guide)

PSG College of Nursing,

Coimbatore 641 004.

Respected Madam,

Subject :- Your permission letter dated 05/02/2015 – Regarding.

*****

We are happy to inform you that we are giving permission to undergo Pilot study for Mrs. Neethu Joseph. , student of PSG College of Nursing from 23/02/2015 to 27/02/2015 (2.00pm to 4.00pm).

Thanking you,

P.S.G. HIGH SCHOOL CBE-7 VEDAPATTI

Yours Faithfully,

11/02/15

(M.R. SHIVAKUMAR)

HEAD MASTER
P.S.G. High School
Vedapatti, Coimbatore - 7

ANNEXURE-II

PSG Institute of Medical Sciences & Research
Institutional Human Ethics Committee

Recognized by The Strategic Initiative for Developing Capacity in Ethical Review (SIDCER)
POST BOX NO. 1674, PEELAMEDU, COIMBATORE 641 004, TAMIL NADU, INDIA
Phone : 91 422 - 2598822, 2570170, Fax : 91 422 - 2594400, Email : ihec@psgimsr.ac.in

To
Mrs Neethu Joseph
I M Sc Nursing
PSG College of Nursing
Coimbatore

Ref: Project No.15/083

Date: February 27, 2015

Dear Mrs Neethu Joseph,

Institutional Human Ethics Committee, PSG IMS&R reviewed and discussed your application dated 17.02.2015 to conduct the research study entitled *"A comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas, Coimbatore"* during the IHEC meeting held on 27.02.2015.

The following documents were reviewed and approved:

1. Project Submission form
2. Study protocol
3. Assent form
4. Parental consent form
5. Data collection tool
6. Permission letter from the Heads of Institution
7. Current CVs of Principal investigator, Co-investigator
8. Budget

The following members of the Institutional Human Ethics Committee (IHEC) were present at the meeting held on 27.02.2015 at IHEC Secretariat, PSG IMS & R between 10.00 am and 11.00 am:

Sl. No.	Name of the Member of IHEC	Qualification	Area of Expertise	Gender	Affiliation to the Institution Yes/No	Present at the meeting Yes/No
1	Dr. P. Sathyan (Chairperson, IHEC)	DO, DNB	Clinician (Ophthalmology)	Male	No	Yes
2	Dr. S. Bhuvaneshwari (Member-Secretary, IHEC)	MD	Clinical Pharmacology	Female	Yes	Yes
3	Dr. S.Shanthakumari	MD	Pathology, Ethicist	Female	Yes	Yes
4	Dr. D. Vijaya	M Sc, Ph D	Basic Medical Sciences (Biochemistry)	Female	Yes	Yes

The study is approved in its presented form. The decision was arrived at through consensus. Neither PI nor any of proposed study team members were present during the decision making of the IHEC. The IHEC functions in accordance with the ICH-GCP/ICMR/Schedule Y guidelines. The approval is valid until one year from the date of sanction. You may make a written request for renewal / extension of the validity, along with the submission of status report as decided by the IHEC.

ANNEXURE-III

INFORMED CONSENT

Hereby, I ……..,express my consent wholeheartedly to participate in the study on: A comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas- coimbatore. The details of the study are explained to me. I understand that all personal information's will be maintained confidential.

Name of the Teacher

Signature

Name of the Researcher

Signature

SOP 03-V 3.1 / ANX 10-V 3.0
Institutional Human Ethics Committee
PSG Institute of Medical Sciences and Research, Coimbatore
Parental Consent Form

Title of Study: "A Comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas- Coimbatore".

Name of the Principal Investigator: Neethu Joseph.

Department: Child health nursing.

Your (son/daughter/child/infant/adolescent youth) is invited to participate in a study "A Comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas, Coimbatore". My name is Neethu Joseph and I am a M.Sc Nursing 1st year student,Child Health Nursing department in College of nursing at PSG Institute of Medical Sciences and Research, Coimbatore. I am asking for permission to include your (son/daughter/child/infant/adolescent youth) in this study because I expect to have …50…… (Number) participants in the study. If you allow your child to participate, any information that is obtained in connection with this study and that can be identified with your (son/daughter/child/infant/adolescent youth) will remain confidential and will be disclosed only with your permission. His or her responses will not be linked to his or her name or your name in any written or verbal report of this research project. Your decision to allow your (son/daughter/child/infant/adolescent youth) to participate will not affect your or his or her present or future relationship with PSGIMS&R or PSG Hospitals .If you have any questions about the study, please ask me. If you have any questions later, call me at 8098165508 .You may keep a copy of this consent form. You are making a decision about allowing your (son/daughter/child/infant/adolescent youth) to participate in this study. Your signature below indicates that you have read the information provided above and have decided to allow him or her to participate in the study. If you later decide that you wish to withdraw your permission for your (son/daughter/child/infant/adolescent youth) to participate in the study, simply tell me. You may discontinue his or her participation at any time. *This will not affect in any way your future treatment in this hospital or at the School.*

Printed Name of (son/daughter/child/infant/adolescent youth)

Signature of Parent(s) or Legal Guardian with Date

Signature of Investigator with date

SOP 03-V 3.1 / ANX 09-V 2.0
Institutional Human Ethics Committee
PSG Institute of Medical Sciences and Research, Coimbatore
Assent to be in a Research Study
For children between 7-18 years old

We want to tell you about something we are doing called a research study. My research study is on: "A Comparative study to assess the usage of electronic media and its impact on the traditional play, health and wellbeing with a view to provide an information booklet and need-based education to the school children in selected schools in the urban and rural areas- Coimbatore".

The objectives of this study are:

-Primary Objective: To assess the usage of electronic media(mobile phones, computers, video games& television) among school children.

To compare the usage of electronic media among school children in the urban and rural areas.

-Secondary Objective: To assess the impact of electronic medias on the traditional play, health and wellbeing of school children.

- **Intervention:** After analyzing the results, provide education according to the student's needs and an information booklet.

Sample size: 50

Study volunteers / participants are (specify population group & age group): students (boys and girls)of classes 6-9 ,aged 10-14 years.

Location: GRG Matriculation Higher Secondary school, Peelamedu and PSG Public School, Vedapatty .

Benefits from this study: After analysing the results, according to the needs of the children, education will be given along with an information booklet.

Risks involved by participating in this study: There is no risk.

If you are uncomfortable in participating in this research study, **you have the right to withdraw from the interview / study at anytime**. Kindly be assured that your refusal to participate or withdrawal at any stage, if you so decide, will not result in any form of compromise or discrimination in the services offered nor would it attract any penalty. You will continue to have access to the regular services offered to a student attending your school. You will **NOT** be paid any remuneration for the time you spend with us for this interview / study. The information provided by you will be kept in strict confidence. Under no circumstances shall we reveal the identity of the respondent or their families to anyone. The information that we collect shall be used for approved research purposes only. You will be informed about any significant new findings - including adverse events, if any, – whether directly related to you or to other participants of this study, developed during the course of this research which may relate to your willingness to continue participation

SIGNATURE OF PERSON CONDUCTING ASSENT DISCUSSION

I have explained the study to _____(*print name of child here*) in language he/she can understand, and the child has agreed to be in the study.

_____ _____
Signature of Person Conducting Assent Discussion Date

_____Mrs.Neethu Joseph
Name of Person Conducting Assent Discussion (*print*)

Part 2: Certificate of Assent

I have read this information (or had the information read to me) I have had my questions answered and know that I can ask questions later if I have them.
I agree to take part in the research.

OR

I do not wish to take part in the research and I have not signed the assent below._____

(initialed by child/minor)
Only if child assents:

Print name of child _____

Signature of child: _____

Date:_____
day/month/year

If illiterate:
A literate witness must sign (if possible, this person should be selected by the participant, not be a parent, and should have no connection to the research team). Participants who are illiterate should include their thumb print as well. I have witnessed the accurate reading of the assent form to the child, and the individual has had
the opportunity to ask questions. I confirm that the individual has given consent freely.

*Print name of witness (not a parent)*_____ *AND Thumb print of participant*

Signature of witness _____
Date _____
Day/month/year

I have accurately read or witnessed the accurate reading of the assent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given assent freely.
Print name of researcher_____
**Modified from the Informed Assent form template for children/minors –World Health Organization*

¦ÀüSÈ¡÷ ´ôÒ¾ø ÀÊÅõ

¾¨ÄôÒ:
¿¸÷ôÒÈõ ÁüÚõ ¸¢Ã¡ÁôÒÈ Á¡½Å÷¸Ç¢ý Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ÁüÚõ «Åü¨È ÀÂýÀÎòÐÅ¾¡ø Á¡½Å÷¸Ç¢ý ¯¼ø ¿Äõ, ¸øÅ¢ ÁüÚõ ¿ýÉ¼ò¨¾ ¬¸¢ÂÅüÈ¢ø ²üÀÎõ À¡¾¢ô¨À ¸ñ¼È¢Ôõ ¬ö×

À¢Ã¡¾¡É «ÛºÃ¨½Â¡Ç÷ ¦ÀÂ÷: **¿£òÐ §ƒ¡…ô**

Ð¨È: ÌÆó¨¾¸û ¿Ä ÁÕòÐÅõ

¿¡ý þó¾ ¬öÅ¢ø ¯í¸û (Á¸ý / Á¸û / ÌÆó¨¾¸û) §º÷ì¸ «ÛÁ¾¢ §¸ð¸¢§Èý.

±ý ¦ÀÂ÷ **¿£òÐ §ƒ¡…ô,** ÓÐ¸¨Ä ¦ºÅ¢Ä¢Â÷, PSG IMS&R, §¸¡ÂÓòà÷.

±ý ¬ö× ÌÈ¢ì§¸¡û:

- ¿¡í¸û ¿¸÷ôÒÈõ ÁüÚõ ¸¢Ã¡ÁôÒÈ Á¡½Å÷¸Ç¢ý Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡ð¨¼ «È¢Â ÓÂø¸¢§È¡õ.

¿¡ý þó¾ ¬öÅ¢ø ¯í¸û (Á¸ý / Á¸û / ÌÆó¨¾¸û) §º÷ì¸ «ÛÁ¾¢ §¸ð¸¢§Èý, ²¦ÉÉ¢ø ¿¡ý þó¾ ¬öÅ¢ø 100 ÌÆó¨¾¸û Àí§¸üÀ¡÷¸û ±ýÚ ±¾¢÷À¡÷ì¸¢§Èý. ¿£í¸û ¯í¸û ÌÆó¨¾¨Â Àí§¸ü¸ º¢Ä §¸ûÅ¢¸û §¸ð¸ôÀÎõ.

þó¾ ¬ö× ¦¾¡¼÷À¡¸ ¯í¸û (Á¸ý / Á¸û / ÌÆó¨¾¸û) ¦ÀÈôÀð¼ ¾¸Åø¸û þÃ¸º¢ÂÁ¡¸ þÕìÎõ. ¯í¸û «ÛÁ¾¢Ô¼ý ÁðÎ§Á ÁüÈÅ÷¸û «È¢óÐ ¦¸¡ûÇ ÓÊÔõ.

¯í¸û (Á¸ý / Á¸û / ÌÆó¨¾¸û) ¾ü§À¡Ð Àí§¸ü¸ «ÛÁ¾¢ ¦¸¡ÎìÎõ ÓÊ×¸û PSG IMS&R ÁÕòÐÅÁ¨ÉÂ¢ý ¯ÈÅ¢ø ±¾¢÷¸¡Äò¾¢ø ±ó¾ Å¢¾ À¡¾¢ôÒõ þÕì¸¡Ð.

¯í¸Ùì¦Ì ¬öÅ¢ø ²§¾Ûõ §¸ûÅ¢¸û þÕó¾¡ø ±ý¨É §¸Ùí¸û. þó¾ ¬ö× ¦¾¡¼÷À¡¸ ¯í¸û (Á¸ý / Á¸û / ÌÆó¨¾¸û) ÀüÈ¢ ±ó¾ §¸ûÅ¢¸û «øÄÐ ¸Å¨Ä¸û þÕó¾¡ø ±ý¨É «¨Æì¸×õ (80198165508).

þó¾ ´ôÒ¾ø ÀÊÅò¾¢ø ´Õ À¢Ã¾¢¨Â ¿£í¸û ¦ÀüÚì¦¸¡ûÇÄ¡õ. ¿£í¸û þó¾ ¬öÅ¢ø Àí§¸ü¸ ¯í¸û (Á¸ý / Á¸û / ÌÆó¨¾¸û) ÓÊ×¦ºö¸¢È£÷¸Ç¡É¡ø ¸£§Æ ¨¸¦ÂØò¾¢ðÎ «¾ü¸¡É ´ôÒ¾¨Ä «Ç¢ì¸ §ÅñÎõ.

±ó¾ §¿Ãò¾¢ø §ÅñÎÁ¡É¡Öõ ¬öÅ¡ÇÃ¢¼õ ¦¾Ã¢Å¢òÐÅ¢ðÎ ¬öÅ¢Ä¢ÕóÐ Å ¢Ä¸¢ì¦¸¡ûÙõ ¯Ã¢¨Á ¯í¸Ùì¯ñÎ.

¦ÀÂ÷ (Á¸ý / Á¸û / ÌÆó¨¾¸û):

¦Àü§È¡÷ «øÄÐ º ð¼ôâ÷ÅÁ¡É À¡Ð¸¡ÅÄÃ¢ý ¨¸¦Â¡ôÀõ / §¾¾¢

¬öÅ¡ÇÃ¢ý ¨¸¦Â¡ôÀõ / §¾¾¢

ÁÉ¢¾ ¦¿È¢Ó¨Èì ÌØ, â º¡ §¸¡ ÁÕòÐÅì ¸øæÃ¢ ÁüÚõ ¬Ã¡öîº¢ ¿¢ÚÅÉõ

¬Ã¡öîº¢Â¢ø ÀíÌ ¦ÀÚÅ¾ü¸¡É ´ôÒ¾ø ÀÊÅõ

7 Ó¾ø 18 ÅÂ¾¢üÌ ¯ðÀð¼ ÌÆó¨¾¸Ùì¸¡ÉÐ

¿¡¡í¸û ±³¼ü¸¡¸ ¯í¸¨Ç ºó³¼¢ì¸¢§È¡õ?

¿¡í¸û §Áü¦¸¡ûÇ þÕìÌõ ¬öÅ¢¨Éô ÀüÈ¢ ¯í¸ÙìÌ ÜÈ ¯û§Ç¡õ. ¬ö× ±ýÀÐ ÁÕòÐÅ÷¸û ¯¼ø ¿Äõ ÁüÚõ Å¢Â¡¾¢¸û ÌÈ¢òÐ ¾¸Åø¸û §º¸Ã¢ò¾ø ¬Ìõ. ¦ºÅ¢Ä¢Â÷ **¿£òÐ §ƒ¡…ô,** ÁüÚõ º¢Ä÷ §º÷óÐ ¿¸÷ôÒÈõ ÁüÚõ "**¸¢Ã¡ÁôÒÈ Á¡½Å÷¸Ç¢ý Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ÁüÚõ «³¼É¡ø ¯¼ø ¿Äý, ¸øÅ¢ ÁüÚõ ¿ýÉ¼ò¨¾Â¢ø ²üÀÎõ Á¡üÈò¨¾ ¸ñ¼È¢Å³¼ü¸¡É ¬ö×**" ÀüÈ¢ §ÁÖõ ¾¸Åø¸û «È¢óÐ ¦¸¡ûÇ ´Õ ¬ö× §Áü¦¸¡ûÇ ¯ûÇÉ÷. «¾¨Éô ÀüÈ¢ ¿¡í¸û ¯í¸ÙìÌ Å¢ÅÃÁ¡¸ì ÜÈ¢Â À¢ý þó¾ ¬öÅ ¢ø Àí§¸üÀÐ ÀüÈ¢ ¯í¸û ¸Õò¾¢¨Éò ¦¾Ã¢Å¢ì¸Ä¡õ.

¿¡¡í¸û ±³¼ü¸¡¸ þó¾ ¬öÅ¢¨É §Áü¦¸¡û¸¢§È¡õ?

¿¡í¸û ¿¸÷ôÒÈõ ÁüÚõ ¸¢Ã¡ÁôÒÈ Á¡½Å÷¸Ç¢ý Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡ð¨¼ «È ¢Â ÓÂø¸¢§È¡õ. ±É§Å ¯í¸¨Çô§À¡ýÈ ÀÄ ÌÆó¨¾¸Ç¢½õ ¾¸Åø §º¸Ã¢ì¸ ¯û§Ç¡õ. þó¾ ¬öÅ¢ø ÍÁ¡÷ **100** ÁüÚõ «¾üÌ §ÁüÀð¼ ÌÆó¨¾¸û ÀíÌ ¦ÀÈ ¯ûÇÉ÷.

þó³¼ ¬öÅ¢ø ¿£í¸û Àí§¸üÈ¡ø ±ýÉ ¿¼ìÌõ?

¿£í¸û Á¢ýÉÛ º¡¾Éí¸¨Ç ÀÂýÀÎòÐõ Ó¨È¸¨Ç ÀüÈ¢Â º¢Ä §¸ûÅ¢¸ÙìÌ À¾¢ÄÇ¢ì¸ §ÅñÎõ.

þó³¼ ¬öÅ¢É¡ø ÅÄ¢ ²üÀÎÁ¡?

þø¨Ä

þó³¼ ¬öÅ¢ø Àí§¸üÀ¾¡ø ¿Äõ «¨¼Å£÷¸Ç¡?

þø¨Ä. þ¾É¡ø ¿£í¸û ¿ÄÁ¨¼Â ÓÊÂ¡Ð. ¬É¡ø, ¦ºÅ¢Ä¢Â÷¸û þó¾ ¬öÅ¢ý ãÄõ À ¢ü¸¡Äò¾¢ø ¯í¸¨Çô §À¡ýÈ ÌÆó¨¾¸ÙìÌ ¯À§Â¡¸ô ÀÎõ Å¨¸Â¢ø º¢Ä ÅÆ¢Ó¨È¸¨Çì ¸ñÎÀ¢Êì¸Ä¡õ.

±ø§Ä¡Õìlõ ±ý ¿¢¨Ä ÀüÈ¢ ¦¾Ã¢Â ÅÕÁ¡? (¿õÀ¸ò¾ý¨Á)

¿£í¸û þó¾ ¬öÅ¢ø Àí§¸üÀ¨¾ ¿¡í¸û ÁüÈÅ÷¸ÙìÌò ¦¾Ã¢Å¢ì¸ Á¡ð§¼¡õ. ¯í¸¨Çô ÀüÈ ¢Â ¾¸Åø¸¨Ç ¬öÅ¢ø ºõÀó¾ô À¼¡¾ ¿À÷¸ÙìÌò ¦¾Ã¢Å¢ì¸ Á¡ð§¼¡õ.

þó¾ ¬ö× ±ÉìÌ ¦¸Î¾ø «øÄÐ ¬ÀòÐ Å¢¨ÇÅ¢ìÌÁ¡?

þø¨Ä

þó¾ ¬öÅ¢ø ÀíS¸üÀ¾¡ø ±ÉìÌ ±Ð×õ ¸¢¨¼ìÌÁ¡?

þø¨Ä

¿£í¸û ±ÉìÌ þó¾ ¬öÅ¢ý ÓÊ×¸¨Çò ¦¾Ã¢Å¢ôÀ£÷¸Ç¡?

¿£í¸û Å¢ÕôÀô Àð¼¡ø, þó¾ ¬öÅ¢ý ÓÊ×¸û ¯í¸ÙìÌò ¦¾Ã¢Âô ÀÎò¾ôÀÎõ.

¯í¸ÙìÌ ²S¾Ûõ S¸ûÅ¢¸û ¯ûÇ¾¡?

¿£í¸û þô¦À¡Ø§¾¡ À¢ýÉ§Ã¡ ±ó¾ §¿Ãò¾¢Öõ ¯í¸û º ó§¾¸í¸¨Çì §¸ð¸Ä¡õ. ±ýÉ ¢¼§Á¡ «øÄÐ þó¾ ¬öÅ¢ý À¢È ¬Ã¡öîº¢Â¡Ç÷¸Ç¢¼§Á¡ ¯í¸û º ó§¾¸í¸¨Çì §¸ð¸Ä¡õ.

þó¾ ¬öÅ¢ø ¿£í¸û ÀíS¸ü¸ §ÅñÎÁ¡?

þø¨Ä. þ¾¢ø Àí§¸ü¸¡¾¾¡ø ¯í¸¨Ç Â¡Õõ ±Ð×õ ¦ºöÂô§À¡Å¾¢ø¨Ä. ¯í¸ÙìÌ Å¢ÕôÀõ þø¨Ä ±ýÈ¡ø ±í¸Ç¢¼õ ¦¾Ã¢Å¢ì¸Ä¡õ. ¿£í¸û Àí§¸ü¸ Å¢ÕõÀ¢É¡Öõ ±í¸Ç¢¼õ ¦¾Ã¢Å ¢ì¸Ä¡õ. ¿£í¸û þô¦À¡ØÐ ´òÐì ¦¸¡ñÎ À¢ýÉ÷ ÁÉõ Á¡È¢ ¬öÅ¢Ä¢ÕóÐ Å¢ÄÌÅ¾¡É¡ø Å ¢Ä¸Ä¡õ ±ýÀ¨¾Ôõ ÁÉ¾¢ø ¦¸¡ûÇ×õ.

¿¡ý Â¡Ã¢¼õ §Àº «øÄÐ ºó§¾¸õ §¸ð¸ ÓÊÔõ?

¯í¸ÙìÌ ¬öÅ¢ø ²§¾Ûõ §¸ûÅ¢¸û þÕó¾¡ø ±ý¨É §¸Ùí¸û. þó¾ ¬ö× ¦¾¡¼÷À¡¸ ¯í¸û (Á¸ý / Á¸û / ÌÆó¨¾¸û) ÀüÈ¢ ±ó¾ §¸ûÅ¢¸û «øÄÐ ¸Å¨Ä¸û þÕó¾¡ø ±ý¨É «¨Æì¸×õ (80198165508).

¯í¸ÙìÌ Å¢ÕôÀõ þø¨Ä ±ýÈ¡ø ±í¸Ç¢¼õ ¦¾Ã¢Å¢ì¸×õ. ¿£í¸û Àí§¸ü¸ Å¢ÕõÀ¢É¡ø ±í¸Ç¢¼õ ¦¾Ã¢Å¢ì¸×õ.

´ôÒ¾ø ¸ÄóÐ¨ÃÂ¡¼ø ¿¼ò¾¢Â ¿ÀÃ¢ý ¨¸¦Â¡ôÀõ

¿¡ý _____ ±ýÛõ ÌÆó¨¾ìÌô ÒÃ¢Ôõ ¦Á¡Æ¢Â¢ø þó¾ ¬öÅ¢¨Éô ÀüÈ¢ Å¢ÅÃ¢òÐû§Çý. ÌÆó¨¾ þó¾ ¬öÅ¢ø ÀíÌ ¦ÀÈ ´ôÒì ¦¸¡ñÎûÇÐ.

¸ÄóÐ¨ÃÂ¡¼ø ¦ºö¾Å÷ ¨¸¦Â¡ôÀõ _____ §¾¾¢

¸ÄóÐ¨ÃÂ¡¼ø ¦ºö¾Å÷ ¦ÀÂ÷ _____

À¡¸õ 2-´ôÒ¾ø º¡ýÈ¢¾ú

¿¡ý þó¾ ¾¸Å¨Äô ÀÊòÐò ¦¾Ã¢óÐ ¦¸¡ñ§¼ý (ÀÊòÐò ¦¾Ã¢Å¢ì¸ôÀðÎû§Çý). ±ÉÐ º ó§¾¸í¸¨Çì §¸ðÎ ¦¾Ç¢× ÀÎò¾¢ì ¦¸¡ñ§¼ý. À¢ü¸¡Äò¾¢Öõ ±ÉÐ º ó§¾¸í¸¨Çì §¸ð¸Ä¡õ ±ýÀ¨¾Ôõ «È¢óÐ ¦¸¡ñ§¼ý.

¿¡ý þó¾ ¬öÅ¢ø ÀíÌ ¦ÀÈ Å¢ÕõÒ¸¢§Èý
(«øÄÐ)
±ÉìÌ þó¾ ¬öÅ¢ø Àí§¸ü¸ Å¢ÕôÀõ þø¨Ä, ¿¡ý ¸£ú ¸ñ¼ ´ôÒ¾ø ÀÊÅò¾¢ø ¨¸¦ÂØò¾ ¢¼Å¢ø¨Ä _____ (ÌÆó¨¾Â¢ý ¨¸¦Â¡ôÀõ)

ÌÆó¨¾ ´ôÒi¦ ¸¡ñ¼¡ø ÁòÎõ

1. ÌÆó¨¾Â¢ý ¦ÀÂ÷
2. ÌÆó¨¾Â¢ý ¨¸¦Â¡ôÀõ
3. §¾¾¢

ÀÊôÀÈ¢Å¢øÄ¡¾Å÷¸Ç¡¸ þÕó¾¡ø

´Õ ÀÊò¾ º¡ðº¢ (ÌÆó¨¾Â¢ý ¦Àü§È¡ÃøÄ¡¾, Àí§¸üÀÅÃ¡ø §¾÷ó¦¾Îì¸ôÀð¼ ´Õ ¿À÷) ¨¸¦Â¡ôÀÁ¢¼§ÅñÎõ. ÀÊôÀÈ¢Å¢øÄ¡¾Å÷ ¾í¸û ¨¸¿¡ð¨¼ô À¾¢ì¸§ÅñÎõ. ÌÆó¨¾Â¢¼õ ´ôÒ¾ø ¦ÀÚõ ¦À¡ØÐ þó¾ô ÀÊÅõ ÀÊì¸ô Àð¼¨¾ ¿¡ý ¯¼É¢ÕóÐ ¸ÅÉ ¢ò§¾ý. Àí§¸üÀ¡Ç÷ ¾ÉÐ º ó§¾¸í¸¨Çì §¸ðÎ ¦¾Ã¢óÐ ¦¸¡ûÇ Å¡öôÀÇ¢ì¸ôÀð¼Ð ±ýÀ¨¾ «È¢óÐ ¦¸¡ñ§¼ý. Àí§¸üÀ¡Ç÷ ¾ÉÐ ´ôÒ¾¨Ä ¾ÉÐ ¦º¡ó¾ Å¢ÕôÀò¾¢ø ¾¡ý ¦¾Ã¢Å¢ò¾¡÷ ±ýÚ +Ú¾¢ÂÇ¢ì¸¢§Èý.

º¡ðº¢Â¢ý ¦ÀÂ÷ _____ Àí§¸üÀÅÃ¢ý ¨¸¿¡ðÎ

º¡ðº¢Â¢ý ¨¸¦ÂØòÐ _____

§¾¾¢ _____

¿¡ý Àí§¸üÀ¡ÇÕìÌ ´ôÒ¾ø ÀÊÅò¨¾ ÓØÅÐõ ÀÊòÐì ¸¡ðÊ§Éý / ÀÊòÐì ¸¡ðÊÂ¨¾ ¸ÅÉ¢ò§¾ý. Àí§¸üÀ¡Ç÷ ¾ÉÐ º ó§¾¸í¸¨Çì §¸ðÎ ¦¾Ã¢óÐ ¦¸¡ûÇ Å¡öôÀÇ¢ì¸ôÀðð¼Ð ±ýÀ¨¾ «È¢óÐ ¦¸¡ñ§¼ý. Àí§¸üÀ¡Ç÷ ¾ÉÐ ´ôÒ¾¨Ä ¾ÉÐ ¦º¡ó¾ Å¢ÕôÀò¾¢ø ¾¡ý ¦¾Ã¢Å¢ò¾¡÷ ±ýÚ ¯Ú¾¢ÂÇ¢ì¸¢§Èý.

¬öÅ¡ÇÃ¢ý ¦ÀÂ÷ _____

ANNEXURE-IV

INSTRUCTIONS TO THE PARTICIPANTS

This is a questionnaire which consists of questions related to your Bio-data, play activities and the usage of electronic medias. The students are requested to go through each question and answer appropriately. Complete the questionnaire within 30 minutes.

Section A: Bio-data. (This section deals with your personal information.)

1. Age?
2. Gender:
    a. Male [ ]
    b. Female [ ]
3. Class?
4. Religion:
    a. Hindu [ ]
    b. Muslim [ ]
    c. Christian [ ]
    d. Others [ ]
5. Bread-winner of the family:
    a. Father [ ]
    b. Mother [ ]
    c. Significant others
6. Type of firm the parent is working:
    a. Government firm [ ]
    b. Private firm [ ]
    c. Self – employed [ ]
7. Family income per month?
8. Type of family
    a. Nuclear family [ ]
    b. Joint family [ ]
    c. Extended family [ ]
9. Number of siblings?
    a. 1 [ ]
    b. 2 [ ]
    c. 3 or more [ ]
    d. None [ ]
10. Ordinal position in the family?
    a. First [ ]
    b. Second [ ]
    c. Third [ ]
    d. Fourth or more [ ]
11. Height
12. Weight
13. Vision

Section B: Tool to collect data related to play activities of the school children. (You are requested to kindly give your honest replies for each question).

1. How much time do you spent in play activities everyday?

(a) 30 min. [ ]

(b) 1 hour [ ]

(c) 2 hours [ ]

(d) 3 hours or more [ ]

2. Which type of play are you interested in?

(a) Outdoor [ ]

(b) Indoor [ ]

Specify: _____

3. What kind of play activity are you interested?

(a) Playing alone [ ]

(b) Group play [ ]

4. Which of the following traditional games do you play?

(a) Hide and seek [ ]

(b) Kite-flying [ ]

(c) Police and robber [ ]

(d) Pallanguzhi [ ]

(e) Kho-Kho [ ]

(f) Gilli-Danda [ ]

(g) Kith Kith [ ]

(h) Carrom [ ]

(i) Thaayam [ ]

(j) Some of the above [ ]

(k) None of the above [ ]

5. Which is your most favourite game/ sport?

6. Do you participate in sports activities at school?

(a) Yes [ ]

(b) No [ ]

Specify (Athletics/sports) : _____

7. How many hours per day do you spend in play at school?

(a) 30 min [ ]

(b) 1 hour [ ]

(c) 2 hours [ ]

(d) 3 hours or more [ ]

8. How many hours per day do you spend in play at home?

(a) 30 min [ ]

(b) 1 hour [ ]

(c) 2 hours [ ]

(d) 3 hours or more [ ]

9. Which among the following electronic devices do you use?

(a) Television [ ]

(b) Computer [ ]

(c) Mobiles [ ]

(d) Play Station (video games) [ ]

10. Which device do you use the most? ----------

11. How much time do you spent on your favourite electronic device?

(a) 1 hour [ ]

(b) 2 hours [ ]

(c) 3 hours [ ]

(d) More than 3 hours [ ]

12. How many hours do you spend infront of television every day?

(a) 30 min. [ ]

(b) 1 hour [ ]

(c) 2 hours [ ]

(d) 3 hours or more [ ]

13. How many hours do you use a computer every day?

(a) 30 min. [ ]

(b) 1 hour [ ]

(c) 2 hours [ ]

(d) 3 hours or more [ ]

14. How often do you use a mobile?

(a) Everyday [ ]

(b) Alternate days [ ]

(c) More than 3 times per week [ ]

(d) No time constraints [ ]

15. How often do you use a Play station/videogame?

(a) Once a week [ ]

(b) Twice a week [ ]

(c) No time constraints [ ]

(d) Not using [ ]

16. Do you have a computer/ television in your bed-room?

(a) Yes [ ]

(b) No [ ]

17. How many hours do you sleep at night?

(a) Less than 7 hours [ ]

(b) 7- 8 hours [ ]

(c) More than 8 hours [ ]

18. Do you have any electronic device available at school?

(a) Yes [ ]

(b) No [ ]

If yes, specify. _____

19. What is the purpose of using your favourite electronic device?

(a) Academic [ ]

(b) Social networking [ ]

(c) Games [ ]

Specify (if any other) _____

20. Does using electronic devices help you in your studies or games?

(a) Yes [ ]

(b) No [ ]

If yes, specify. _____

SECTION C: Rating scale to assess the well-being of students during the school hours.

Instruction to the teacher: You are requested to give your honest responses for the given items. Electronic devices mentioned here can be any of the following: Television, Computer, Mobile phone or a play station / Videogame.

SI. NO	ITEM	RESPONSES			SCORE
		ALWAYS	SOMETIMES	NEVER	
1.	The student performs well academically.				
2.	The play activities provided at the school is enough for the student's physical development.				
3.	The energy level of student is good even after minimum involvement in play activities.				
4.	Use of electronic device increases the student's attention and memory.				
5.	Use of electronic media increases the student's social skills and group interactions.				
6.	The student participates in the events conducted by the school.				
7.	The student is active during the school hours.				
8.	The student maintains a cordial relationship with everyone.				
9.	Use of electronic device have decreased the student's physical activities.				
10.	The student is easily distracted in the class.				
11.	The student sleeps during the class hours.				
12.	The student complaints of headache, vision problems such as blurring, short sight, long sight etc.				
13.	The student is very violent/ misbehaves in school.				

SECTION D: A questionnaire to assess the well-being of school children in the family.

Instruction to the parent: You are requested to give your honest responses for the given items. Traditional games mentioned here are Hide & seek, kite-flying, Pallanguzhi, Kho-kho,Thaayam etc.Electronic devices mentioned here can be any of the following: Television, Computer, Mobile phone or a play station / Videogame.

1. How many hours do you allow your child to spend in outdoor activities every day?
   (a) 30 min. [ ]
   (b) 1 hour [ ]
   (c) 2 hours [ ]
   (d) 3 hours or more [ ]

2. Have you taught your child any traditional games such as hide and seek , kite flying, pallanguzhi, kho-kho, gilli-danda etc. ?
   (a) Yes [ ]
   (b) No [ ]
   If not, why?_____

3. Do you play with your child?
   (a) Yes [ ]
   (b) No [ ]
   If not, why? _____

4. Do you feel that the present generation is very different from the older generations in aspects such as traditional play and health?
   (a) Yes [ ]
   (b) No [ ]
   If yes, specify? _____

5. What are some of the electronic devices that you have at home?

   _____

6. How many hours do you permit your child to watch t.v or use other electronic devices every day?
   (a) 30 min. [ ]
   (b) 1 hour [ ]
   (c) 2 hours [ ]
   (d) 3 hours or more [ ]

7. Do you monitor the content of the program your child is watching on T.V or Computer?

   (a) Yes [ ]

(b) No [ ]

8. Does your child have a favourite play?

(a) Yes [ ]

(b) No [ ]

Specify (if yes)._____

9. Do you allow your child to watch television before going to bed?

(a) Yes [ ]

(b) No [ ]

10. Do you feel that the traditional games have been replaced by the electronic devices?

(a) Yes [ ]

(b) No [ ]

SECTION E: Rating scale to assess the well-being of school children in the family.

Instruction to the parent: Kindly give your honest response about your child's activities at home. Electronic devices mentioned here can be any of the following: Television, Computer, Mobile phone or a play station / Videogame.

SI. NO	ITEM	RESPONSES			SCORE
		ALWAYS	SOMETIMES	NEVER	
1.	Your child spends time with friends in outdoor games.				
2.	Your child plays with the siblings.				
3.	You spent more than 2 hours talking to your child.				
4.	Your child mingles with others easily.				
5.	Your child has a routine in all the activities.				
6.	Using the electronic device have helped your child to be motivated and engaged in learning.				
7.	The usage of electronic media has more positive effect on your child than negative effect.				
8.	You buy any electronic device that your child asks for.				
9.	Your child spends more than one and a half hours infront of his/her favourite electronic device.				
10.	Your child is obsessed with his/her favourite media characters.				
11.	Your child is short- tempered.				
12.	Your child eats snacks while watching Television.				
13.	Your child have resorted to violent activities after watching programs containing violence scenes				

SECTION F: Parents opinionnaire on the impact of electronic media on school children .

Instruction to the parent: Kindly provide your honest opinion for the following questions. Electronic devices mentioned here can be any of the following: Television, Computer, Mobile phone or a play station / Videogame.

SI. NO	ITEM	RESPONSES			SCORE
		ALWAYS	SOMETIMES	NEVER	
1.	Use of electronic devices have helped your child to improve his/her language and listening abilities.				
2.	Electronic devices have improved your child's ability to concentrate and maintain attention in studies.				
3.	Use of electronic devices have helped your child in achieving co-ordination of movements.				
4.	Quality time spend in handling the electronic devices have helped your child to gain knowledge and understanding of the world.				
5.	Electronic media usage have created an awareness in your child about behavioral expectations such as good manners ,fighting is bad etc.				
6.	Usage of electronic devices have increased your child's curiosity.				
7.	Electronic medias have helped your child to be more adventurous and outgoing.				
8.	Your child's sleeping pattern have changed.				
9.	More involvement in the electronic devices have caused your child to spend less time in outdoor activities.				
10.	Excess use of electronic media have caused your child to be isolated from friends.				
11.	Being inactive and dependent on electronic devices have caused changes in your child's body weight.				
12.	Your child uses earphone / headset that cause hearing problems				
13.	Your child complaints of headache, vision problem such as blurring, short sight, long sight, etc.,				

Scoring Interpretation:

Section C: For each question , maximum score is 3 and minimum score is 1.Reverse scoring is used in questions: 9-13.

(a) 27-36 : Optimum well-being

(b) 18-26 : Moderate well-being

(c) 12-17 : Minimum well-being

Section E: For each question, maximum score is 3 and minimum score is 1.Reverse scoring is used in questions: 8-13.

(a) 29-39 : Optimum well-being

(b) 20-28 : Moderate well-being

(c) 13-19 : Minimum well-being

Section F: For each question, maximum score is 3 and minimum score is 1. Reverse scoring is used in questions: 8-13.

(a) 29-39 : Optimum well-being

(b) 20-28 : Moderate well-being

(c) 13-19 : Minimum well-being

Àí§¸üÀÅ÷¸Ùì¸¡É ¾¸Åø¸û

þó¾ §¸ûÅ¢ò¦¾¡ÌôÒ ¾í¸ÇÐ ¾É¢ò¾ ¾¸Åø, Å¢¨ÇÂ¡ðÎò¾¢Èý ÁüÚõ Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀÎòÐõ ¾¸Åø¸û ¬¸¢ÂÅüÈ¢ý ¾¸Åø¸û ¬Ìõ. Á¡½Å÷¸û «¨ÉòÐ §¸ûÅ ¢¸¨ÇÔõÀÊòÐ À¡÷òÐ ÒÃ¢óÐ ¦¸¡ñÎ À¾¢ø «Ç¢ìÌÁ¡Ú §¸ðÎì¦¸¡ûÇôÀÎ¸¢È¡÷¸û. þó¾ §¸ûÅ¢¸ÙìÌ 35 ¿¢Á¢¼í¸Ç¢ø À¾¢ø «Ç¢ì¸×õ.

À¾¢ - «
À§Â¡ §¼ð¼¡ (þó¾ À¾¢ ¾í¸Ù¨¼Â ¾É¢ ¾¸Åø¸û ¦¾¡¼÷Ò¨¼ÂÐ)

1. ÅÂÐ: _____
2. À¡Ä¢Éõ
   a. ¬ñ [ ]
   b. ¦Àñ [ ]
3. ÅÌôÒ: _____
4. ÌÎõÀ Á¡¾ ÅÕÁ¡Éõ: _____
5. ÌÎõÀò¾¢ý ¾ý¨Á:
   a. º¢È¢Â ÌÎõÀõ [ ]
   b. Üðî ÌÎõÀõ [ ]
   c. ¦ÀÃ¢Â ÌÎõÀõ [ ]
6. ¯¼ý À¢Èó§¾¡÷ ±ñ½¢ì¨¸:
   a. 1 [ ]
   b. 2 [ ]
   c. 3, «¾üÌ §ÁÖõ [ ]
   d. þø¨Ä [ ]
7. ¯í¸û ÌÎõÀò¾¢ø ±ò¾¨ÉÂ¡ÅÐ ÌÆó¨¾
   a. Ó¾ø [ ]
   b. þÃñ¼¡ÅÐ [ ]
   c. ãýÈ¡ÅÐ [ ]
   d. ¿¡ýÌ «¾üÌ §ÁÖõ [ ]
8. ¯ÂÃõ: _____
9. ±¨¼: _____
10. §¿¡ì¸õ: _____

À¾¢ - ¬

ÀûÇ¢ì ÌÆó¨¾¸Ç¢ý Å¢¨ÇÂ¡ðÎ Ó¨È¸û ÌÈ¢ò¾ ¾¸Åø¸û ¦¾¡¼÷Ò («¨ÉòÐ §¸ûÅ ¢¸ÙìÌõ §¿÷¨ÁÂ¡¸ À¾¢ø «Ç¢ìÌÁ¡Ú §¸ðÎì¦¸¡ûÇôÀÎ¸¢È£÷¸û)

1. ¾¢ÉÓõ ±ùÅÇ× §¿Ãõ Å¢¨ÇÂ¡ðÊø ®ÎÀÎ¸¢È£÷¸û?
   a. 30 ¿¢Á¢¼í¸û [ ]

b. 1 Á½¢ §¿Ãõ [ ]
c. 2 Á½¢ §¿Ãõ [ ]
d. 3 Á½¢ §¿Ãõ «¾üÌ §ÁÖõ [ ]

2. ±ó¾ Å¨¸Â¡É Å¢¨ÇÂ¡ð¨¼ Å¢ÕõÒ¸¢È£÷¸û
a. ¦ÅÇ¢ÂÃí¸ Å¢¨ÇÂ¡ðÎ¸û [ ]
b. ¯ûÇÃí¸ Å¢¨ÇÂ¡ðÎ¸û [ ]
c. ÌÈ¢ôÀ¢Î¸: _____

3. ±ó¾ Å¨¸Â¡É Å¢¨ÇÂ¡ð¨¼ ¿£í¸û Å¢ÕõÒ¸¢È£÷¸û?
a. ¾É¢Â¡¸ Å¢¨ÇÂ¡Î¾ø [ ]
b. ÌØÅ¡¸ Å¢¨ÇÂ¡Î¾ø [ ]

4. ¸£úì¸ñ¼ À¡ÃõÀÃ¢Â Å¢¨ÇÂ¡ðÎ¸Ç¢ø ¿£í¸û ±ó¾ Å¢¨ÇÂ¡ð¨¼ Å¢¨ÇÂ¡Î¸ ¢È£÷¸û?
a. ´Ç¢óÐ Å¢¨ÇÂ¡Î¾ø [ ]
b. Àð¼õ Å¢Î¾ø [ ]
c. ¾¢Õ¼ý §À¡Ä£Š [ ]
d. ÀøÄ¡íÌÆ¢ [ ]
e. §¸¡-§¸¡ [ ]
f. ¸¢øÄ¢ ¾¡ñÎ [ ]
g. ¸¢ò - ¸¢ò [ ]
h. §¸Ãõ [ ]
i. ¾¡Âõ [ ]
j. þ¾Ã Å¢¨ÇÂ¡ðÎ¸û [ ]
k. §Áü¸ñ¼ ±Ð×Á¢ø¨Ä [ ]

5. ¯ÉìÌ Á¢¸ Å¢ÕôÀÁ¡É Å¢¨ÇÂ¡ðÎ ±Ð?

6. ÀûÇ¢Â¢ø ¿¼ìÌõ Å¢¨ÇÂ¡ðÎ §À¡ðÊ¸Ç¢ø ¸ÄóÐ ¦¸¡ûÅ¡Â¡?
a. ¬õ [ ]
b. þø¨Ä [ ]
c. ÌÈ¢ôÀ¢Î¸ _____

7. ÀûÇ¢Â¢ø ¿£ ¾¢ÉÓõ ±ùÅÇ× §¿Ãõ Å¢¨ÇÂ¡ÎÅ¡ö?
a. þø¨Ä
b. 1 Á½¢ §¿Ãò¾¢üÌõ Ì¨È×
c. 2 Á½¢ §¿Ãõ
d. 3 Á½¢ §¿Ãõ «¾üÌ §ÁÖõ

8. Å£ðÊø ¿£ ¾¢ÉÓõ ±ùÅÇ× §¿Ãõ Å¢¨ÇÂ¡ÎÅ¡ö?
a. þø¨Ä
b. 1 Á½¢ §¿Ãò¾¢üÌõ Ì¨È×
c. 2 Á½¢ §¿Ãõ
d. 3 Á½¢ §¿Ãõ «¾üÌ §ÁÖõ

9. ¸£§Æ ¯ûÇÅüÈ¢ø ±ó¾ Á¢ýÉÛ º¡¾Éò¨¾ ¿£ ¯À§Â¡¸ôÀÎòÐ¸¢È¡ö?
    a. ¦¾¡¨Äì¸¡ðº¢
    b. ¸õôäð¼÷
    c. «¨Ä§Àº¢ (¦Á¡¨Àø §À¡ý)
    d. ô§Ç Š§¼„ý (Å£Ê§Â¡ §¸õŠ)
10. ±ó¾ Å¨¸ Á¢ýÉÛ º¡¾Éò¨¾ «¾¢¸Á¡¸ ¯À§Â¡¸ôÀÎòÐ¸¢È¡ö?

    _____
11. ¯ÉìÌ Á¢¸×õ À¢Êò¾ Á¢ýÉÛ º¡¾ÉòÐ¼ý ¿£ ±ùÅÇ× §¿Ãõ ¦ºÄÅ¢Î¸¢È¡ö?
    a. 1 Á½¢ §¿Ãõ
    b. 2 Á½¢ §¿Ãõ
    c. 3 Á½¢ §¿Ãõ
    d. 3 Á½¢ §¿Ãò¾¢üÌõ «¾¢¸Á¡¸
12. ¾¢ÉÓõ ¿£ ¦¾¡¨Äì¸¡ðº¢ Óý ±ùÅÇ× §¿Ãõ ¦ºÄÅ¢Î¸¢È¡ö?
    a. 30 ¿¢Á¢¼í¸û
    b. 1 Á½¢ §¿Ãõ
    c. 2 Á½¢ §¿Ãõ
    d. 3 Á½¢ §¿Ãõ «¾üÌ §ÁÖõ
13. ¾¢ÉÓõ ¿£ ¸õôäð¼¨Ã ±ùÅÇ× §¿Ãõ ¯À§Â¡¸ôÀÎòÐ¸¢È¡ö?
    a. þø¨Ä
    b. 1 Á½¢ §¿Ãò¾¢üÌõ Ì¨È×
    c. 2 Á½¢ §¿Ãõ
    d. 3 Á½¢ §¿Ãõ «¾üÌ §ÁÖõ
14. ±ô¦À¡Ø¦¾øÄ¡õ ¿£ «¨Ä§Àº¢¨Â (¦ºø§À¡ý) ¯À§Â¡¸ôÀÎòÐÅ¡ö?
    a. ¾¢ÉÓõ
    b. ´Õ ¿¡û Å¢ðÎ ´Õ ¿¡û
    c. Å¡Ãò¾¢ø 3 ¿¡ð¸ÙìÌ §ÁØ
    d. §¿Ã ÅÃõÒ ±Ð×Á¢ø¨Ä
15. ±ô¦À¡Ø¦¾øÄ¡õ ¿£ ô§Ç Š§¼„ý (Å£Ê§Â¡ §¸õŠ) ¯À§Â¡¸ôÀÎòÐÅ¡ö?
    a. Å¡Ãõ ´ÕÓ¨È
    b. Å¡Ãõ þÕÓ¨È
    c. §¿Ã ÅÃõÒ þø¨Ä
    d. ¯À§Â¡¸ôÀÎò¾ Á¡ð§¼ý
16. ¯ý ÀÎì¨¸ «¨ÈÂ¢ø ¸õôäð¼÷ / ¦¾¡¨Äì¸¡ðº¢ ¯ûÇ¾¡?
    a. ¬õ
    b. þø¨Ä
17. þÃÅ¢ø ¿£ ±ò¾¨É Á½¢ §¿Ãõ àíÌÅ¡ö
    a. 7 Á½¢ §¿Ãò¾¢üÌõ Ì¨È×
    b. 7 Ó¾ø 8 Á½¢ §¿Ãõ
    c. 8 Á½¢ §¿Ãò¾¢üÌõ «¾¢¸Á¡¸

18. ¯ý ÀûÇ¢Â¢ÖÉìÌ ²§¾Ûõ Á¢ýÉÛ º¡¾Éõ ¸¢¨¼ìÌõ Å¡öôÒ ¯ûÇ¾¡?
    a. ¬õ
    b. þø¨Ä
    c. ¬õ ±É¢ø, ±ýÉ Å¨¸ _____
19. ¯ý Å¢ÕôÀÁ¡É Á¢ýÉÛ º¡¾Éò¨¾ ÀÂýÀÎòÐõ §¿¡ì¸õ ±ýÉ?
    a. ¸øÅ¢ì¸¡¸
    b. ºã¸ Å¨Ä¾Çí¸û
    c. Å¢¨ÇÂ¡ÎÅ¾ü¸¡¸
    d. §ÅÚ ²¾¡ÅÐ ±É¢ø ÌÈ¢ôÀ¢Î¸ _____
20. Á¢ýÉÛ º¡¾Éí¸¨Ç ÀÂýÀÎòÐÅÐ ¯ÉÐ ÀÊôÀ¢ü§¸¡ «øÄÐ Å ¢¨ÇÂ¡ðÊü§¸¡ ¯À§Â¡¸ôÀÎ¸¢È¾¡?
    a. ¬õ
    b. þø¨Ä
    c. ¬õ ±É¢ø ±ùÅ¨¸Â¢ø _____
21. ºÉ¢ ÁüÚõ »¡Â¢Ú ¬¸¢Â Å¡Ã Å¢ÎÓ¨È ±ùÅ¨¸Â¢ø ¦ºÄÅ¢ÎÅ¡ö?

22. ¯ÉìÌ ²§¾Ûõ ¦À¡ØÐ §À¡ìÌ «øÄÐ ¶ö× §¿Ã ¦ºÂøÀ¡Î¸û ¯ûÇ¾¡?
    a. ¬õ
    b. þø¨Ä
    c. ¬õ ±É¢ø ÌÈ¢ôÀ¢Î¸ _____
23. Å£ðÎ §Å¨Ä¸Ç£ø ¯ý ¦Àü§È¡÷ìÌ ¯¾Å¢ ¦ºöÅ¡Â¡?
    a. ¬õ
    b. þø¨Ä

ÀÌ¾¢ - þ

ÀûÇ¢Â¢ø þÕÌõ §¿Ãí¸Ç¢ø Á¡½Å÷¸Ç¢ý ¿ýÉ¼ò¨¾ ÀüÈ¢Â Á¾¢ôÀ£Î.
¬º¢Ã¢Â÷¸Ùì¸¡É §ÅñÎ§¸¡û:

¸£úì¸ñ¼ÅüÈ¢üÌ §¿÷¨ÁÂ¡¸ À¾¢ø «Ç¢ìÌÁ¡Ú §¸ðÎì¦¸¡ûÇôÀÎ¸¢È£÷¸û. Á¢ýÉÛ º¡¾Éí¸û ±É ÌÈ¢ì¸ôÀÎÀ¨Å, ¦¾¡¨Äì¸¡ðº¢ ¸õôäð¼÷, «¨Ä§Àº¢ «øÄÐ À¢§ÇŠ§¼„ý («) Å£Ê§Â¡ §¸õ.

Å•±ñ	§¸ûÅ¢¸û	±ô¦À¡ØÐõ	º¢Ä°ÁÂõ	þø¨Ä
1.	ÀÊôÀ¢ø ¿ýÈ¡¸§Å ¦ºÂøÀÎ¸¢È¡÷			
2.	ÀûÇ¢Â¢ø ÅÆí¸ôÀÎõ Å¢¨ÇÂ¡ðÎ¸û Á¡½Å÷¸Ç¢ý ¯¼ø ¾¢ÈÛìÌ §À¡ÐÁ¡É¾¡¸ ¯ûÇÐ			
3.	Å¢¨ÇÂ¡¼ ¬ÃõÀ¢òÐ º¢È¢Ð §¿Ãò¾¢üÌ À¢ÈÌ Á¡½ÅÉ¢ý ¯¼ø º¡¾¢ ¿ýÈ¡¸ ¯ûÇÐ.			
4.	Á¢ýÉÛ º¡¾Éò¾¢ý ÀÂýÀ¡Î Á¡½ÅÉ¢ý ã¨Ç ¾ ¢È¨É «¾¢¸ôÀÎò¾¢ ¯ûÇÐ			
5.	¾¸Åø ÀÃ¢Á¡üÈò¾¢ø ÁüÈÅ÷¸Ù¼ý ¿ýÈ¡¸ ¦ÅÇ ¢ôÀÎòÐ¸¢È¡÷			
6.	ÀûÇ¢ ¿¼òÐõ §À¡ðÊ¸Ç¢ø Àí§¸ü¸¢È¡÷			
7.	ÀûÇ¢ §¿Ãò¾¢ø ÍÚÍÚôÀ¡¸§Å þÕì¸¢È¡÷			
8.	Á¡½Å÷ ÁüÈÅ÷¸Ù¼ý «ÛºÃ¨ÉÂ¡¸ ¿¼óÐ ¦¸¡û¸ ¢È¡÷			
9.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î Á¡½ÅÃ¢ý ¯¼ø ¾ ¢È¨É Ì¨ÈóÐûÇÐ.			
10.	ÅÌôÀ¨ÈÂ¢ø ÍÄÀÁ¡¸ ¸ÅÉò¨¾ º¢¾ÈÅ¢Î¸¢È¡÷			
11.	ÅÌôÒ §¿Ãò¾¢ø àí¸¢ Å¢Î¸¢È¡÷			
12.	¾¨ÄÅÄ¢ ÁüÚõ ÁÍ¸Ä¡É À¡÷¨Å, ¸¢ð¼ôÀ¡÷¨Å, àÃôÀ¡÷¨Å §À¡ýÈ À¡÷¨Å Ì¨ÈÀ¡ÎûÇ¾¡¸ Á¡½Å÷ ÜÚ¸¢È¡÷			
13.	ÀûÇ¢Â¢ø ÓÃðÎò¾ÉÁ¡¸×õ / ´Øí¸¢ÉÁ¡¸×õ þÕì¸ ¢È¡÷			

ÀÌ¾¢ - ®

ÀûÇ¢ì ÌÆó¨¾¸û ÌÎõÀò¾¢ø (Å£ðÊø) ±ùÅ¡Ú ¯ûÇÉ÷ ±ýÀ¨¾ «È¢Â §¸ð¸ôÀÎõ §¸ûÅ ¢¸û.

¦ÀüşÈ¡Õıİ: ¸£úì¸¡Ïõ §¸ûÅ¢¸Ùìİ §¿÷¨ÁÂ¡¸ À¾¢ø «Ç¢ìÁ¡Ú §¸ðÎì ¦¸¡ûÇô ÀÎ¸ ¢È£÷¸û. þí§¸ À¡ÃõÀÃ¢Â Å¢¨ÇÂ¡ðÎ ±É ÌÈ¢ì¸ôÀÎÅÐ ´Ç¢óÐ Å¢¨ÇÂ¡Î¾ø, Àð¼õ Å ¢Î¾ø, ÀøÄ¡íÌÆ¢, §¸¡.§¸¡, ¾¡Âõ ¬¸¢ÂÉ. Á¢ýÉÛ º¡¾Éí¸û ±ýÀÐ ¦¾¡¨Äì¸¡ðº¢ ¸õôäð¼÷, «¨Ä§À º¢ «øÄÐ À¢§ÇŠ§¼„ý («) Å£Ê§Â¡ §¸õ.

1. ¾¢ÉÓõ ¯í¸û ÌÆó¨¾ Å£ðÎìÌ ¦ÅÇ¢§Â Å¢¨ÇÂ¡¼ ±ùÅÇ× §¿Ãõ «ÛÁ¾ ¢ôÀ£÷¸û?
    a. þø¨Ä
    b. 1 Á½¢ §¿Ãò¾¢üÌõ Ì¨ÈÅ¡¸
    c. 2 Á½¢ §¿Ãõ
    d. 3 Á½¢ §¿Ãõ «¾üÌõ §Áø
2. ´Ç¢óÐ Å¢¨ÇÂ¡ðÎ, Àð¼õ Å¢Î¾ø, ÀøÄ¡íÌÆ¢, §¸¡. §¸¡, ¸¢øÄ¢ ¾¡ñÎ §À¡ýÈ À¡ÃõÀÃ¢Â Å¢¨ÇÂ¡ðÎì¸¨Ç ¯í¸û ÌÆó¨¾ìÌ ¸üÚ ¾ó¾Ð ¯ñ¼¡?
    a. ¬õ
    b. þø¨Ä
    c. þø¨Ä ±É¢ø, ²ý? _____
3. ¿£í¸û ¯í¸û ÌÆó¨¾Ô¼ý Å¢¨ÇÂ¡ÎÅ£÷¸Ç¡?
    a. ¬õ
    b. þø¨Ä
    c. þø¨Ä ±É¢ø, ²ý? _____
4. À¡ÃõÀÃ¢Â Å¢¨ÇÂ¡ðÎ ÁüÚõ ¬§Ã¡ì¸¢Âõ ¬¸¢ÂÅüÈ¢ø þý¨ÈÂ ¾¨ÄÓ¨È À¨ÆÂ ¾¨ÄÓ¨È§Â¡Î Á¢¸×õ Á¡ÚÀðÎûÇÐ ±É ±ñÏ¸¢È£÷¸Ç¡?
    a. ¬õ
    b. þø¨Ä
    c. ¬õ ±É¢ø, ²ý? _____
5. ±ýÉ ±ýÉ Á¢ýÉÛ º¡¾Éí¸¨Ç Å£ðÊø ¨ÅòÐûÇ£÷¸û?
    _____
    _____
6. ¾¢ÉÓõ ±ùÅÇ× §¿Ãõ ¯í¸û ÌÆó¨¾ ¦¾¡¨Äì¸¡ðº¢ À¡÷ì¸ «ÛÁ¾¢ì¸¢È£÷¸û «øÄÐ §ÅÚ Á¢ýÉÛ º¡¾Éí¸¨Ç ¯À§Â¡¸¢ì¸ Å¢Î¸¢È£÷¸û?
    a. 30 ¿¢Á¢¼í¸û
    b. 1 Á½¢ §¿Ãõ
    c. 2 Á½¢ §¿Ãõ
    d. 3 Á½¢ §¿Ãõ «¾üÌõ §Áø
7. ¦¾¡¨Äì¸¡ðº¢ «øÄÐ ¸õôäð¼Ã¢ø ¯í¸û ÌÆó¨¾ ±ýÉ À¡÷ì¸¢ÈÐ ±ýÀ¨¾ ¸ñ¸¡½¢ôÒ ¦ºö¸¢È£÷¸Ç¡?

a. ¬õ
b. þø¨Ä

8. ¯í¸û ÌÆó¨¾ìÌ À¢Êò¾ Å¢¨ÇÂ¡ðÎ ²§¾Ûõ þÕì¸¢È¾¡?
   a. ¬õ
   b. þø¨Ä
   c. «õ ±É¢ø, ÌÈ¢ôÀ¢Î¸ _____
9. ¯í¸û ÌÆó¨¾ ÀÎì¨¸ìÌ §À¡Ìõ ÓýÒ ¦¾¡¨Äì¸¡ðº¢¨Â À¡÷ì¸ «ÛÁ¾¢ôÀ£÷¸Ç¡?
   a. ¬õ
   b. þø¨Ä
10. ¯í¸û ÌÆó¨¾¨Â ²§¾Ûõ ÀÂ¢üº¢ ÅÌôÒ «øÄÐ þ¨º, ¿¼Éõ, ¸Ã¡ò§¾ §À¡ýÈ ¾¢Èý §ÁõÀ¡ðÎ ÅÌôÀ¢üÌ «ÛôÒ¸¢È£÷¸Ç¡?
    a. ¬õ
    b. þø¨Ä
11. À¡ÃõÀÃ¢Â Å¢¨ÇÂ¡ðÎì¸¨Ç Á¢ýÉÛ º¡¾Éí¸û ¬ìÃÁ¢òÐ Å¢ð¼Ð ±É ±ýÛ¸ ¢È£÷¸Ç¡?
    a. ¬õ
    b. þø¨Ä

ÀÌ¾¢ - ¯

Å£ðÊø ÀûÇ¢ì ÌÆó¨¾¸Ç¢ý ¦ºÂøÀ¡Î ÌÈ¢ò¾ Á¾¢ôÀ£Î.

¦ÀüȨ¡Õì¸¡É ȘÅñÎȘ¸¡û: Å£ðÊø ¯í¸û ÌÆó¨¾¸Ç¢ý ¦ºÂøÀ¡ð¨¼ §¿÷¨ÁÂ¡¸ ¦¾Ã¢Å ¢Ôí¸û. Á¢ýÉÛ º¡¾Éí¸û ±É ÌÈ¢ì¸ôÀÎÀ¨Å, ¦¾¡¨Äì¸¡ðº¢ ¸õôäð¼÷, «¨Ä§Àº¢ «øÄÐ À ¢§ÇŠ§¼„ý («) Å£Ê§Â¡ §¸õ.

Å. ± ñ	Ș¸ûÅ¢¸û	±ô¦À¡ ØÐõ	º ¢Äº Á Âõ	þø¨Ä
1.	¯í¸û ÌÆó¨¾ ¦ÅÇ¢ Å¢¨ÇÂ¡ðÎ¸Ç¢ø ¿ñÀ÷¸Ù¼ý §¿Ãò¨¾ ¦ºÄÅ¢Î¸¢È¡÷.			
2.	¯í¸û ÌÆó¨¾ ¯¼ýÀ¢Èó¾Å÷¸Ù¼ý Å¢¨ÇÂ¡Î¸¢È¡÷			
3.	¿£í¸û ¯í¸û ÌÆó¨¾¸Ù¼ý 2 Á½¢ §¿Ãò¾¢üÌõ «¾¢¸Á¡¸ ¦ºÄ× ¦ºö¸¢È£÷¸û.			
4.	¯í¸û ÌÆó¨¾ ÁüÈÅ÷¸Ù¼ý ÍÄÀÁ¡¸ ÀÆÌ¸¢È¡÷			
5.	¯í¸û ÌÆó¨¾ ÅÆì¸Á¡É ¦ºÂøÀ¡Î¸¨Ç ¿ýÈ¡¸ ¦ºö¸¢È¡÷			
6.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ¯í¸û ÌÆó¨¾Â¢ý ¸øÅ ¢¨Â ¸üÀ¾üÌ àñÎ¾Ä¡¸ ¯ûÇÐ			
7.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ¯í¸û ÌÆó¨¾ìÌ §¿÷Á¨ÈÂ ¢ýÈ¢ ±¾¢÷Á¨È þø¨Ä			
8.	¯í¸û ÌÆó¨¾ §¸ð¼¡ø ±ó¾ Á¢ýÉÛ º¡¾Éò¨¾ Å¡íÌÅ£÷¸û			
9.	¯í¸û ÌÆó¨¾ «ÅÕìÌ À¢Êò¾ Á¢ýÉÛ º¡¾ÉòÐ¼ý ´ýÈ¨Ã Á½¢ §¿Ãò¾¢üÌõ «¾¸Á¡¸¦ºÄÅ¢Î¸¢È¡÷			
10.	¯í¸û ÌÆó¨¾ «ÅÕìÌ À¢Êò¾ ¦¾¡¨Äì¸¡ðº¢ ¸¾¡ôÀ¡ò¾ ¢ÃòÐ¼ý ´ýÈ¢Å¢Î¸¢È¡÷			
11.	¯í¸û ÌÆó¨¾ ±Ç¢¾¢ø ¯½÷îº¢Åºôàðî §¸¡Àõ ¦¸¡û¸ ¢È¡÷			
12.	¯í¸û ÌÆó¨¾ ¦¾¡¨Äì¸¡ðº¢¨Â À¡÷òÐì ¦¸¡ñ§¼ ¦¿¡ÚìÌò¾£½¢¸¨Ç º¡ôÀ¢Î¸¢È¡÷			
13.	¯í¸û ÌÆó¨¾ ÅýÓ¨È ¸¡ðº¢¸û ¯ûÇ ¦¾¡¨Äì¸¡ðº¢ ¦¾¡¼÷¸¨Ç À¡÷ò¾ À¢ýÒ ÅýÓ¨ÈÂ¡ ¿¼óÐ ¦¸¡û¸¢È¡÷			

ÀÌ¾¢ - °

Á¢ýÉÛ º¡¾Éí¸Ç¢ý ¾¡ì¸õ ÌÈ¢ò¾ ¦Àü§È¡Ã¢ý ¸ÕòÐì¸û

¦ÀüȨ¡Õì¸¡É ȘÅñÎȘ¸¡û: ¸£úì¸ñ¼ÅüÈ¢üÌ ¾í¸ÇÐ §¿÷¨ÁÂ¡É ¸Õò¨¾ ÜÈ×õ. þí§¸ Á¢ýÉÛ º¡¾Éí¸û ±É ÌÈ¢ì¸ôÀÎÀ¨Å, ¦¾¡¨Äì¸¡ðº¢ ¸õôäð¼÷, «¨Ä§Àº¢ «øÄÐ À ¢§ÇŠ§¼„ý («) Å£Ê§Â¡ §¸õ.

Å. ± ñ	§¸ûÅ¢¸û	±ô¦À¡ ØÐõ	º ¢Äº Á Âõ	þø¨Ä
1.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ¯í¸û ÌÆó¨¾Â¢ý ¦Á¡Æ¢ ÁüÚõ ¸üÌõ ¾¢È¨É §ÁõÀÎò¾¢ ¯ûÇÐ.			
2.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ¯í¸û ÌÆó¨¾Â¢ý ¸üÈø ÁüÚõ Ü÷óÐ ¸ÅÉ¢ìÌõ ¾¢È¨É §ÁõÀÎò¾¢ ¯ûÇÐ			
3.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ¯í¸û ÌÆó¨¾Â¢ý þ¨½ ¦ºÂø¾¢Èý §À¡ýÈÅü¨È §ÁõÀÎò¾¢ ¯ûÇÐ			
4.	Á¢ýÉÛ º¡¾Éí¸Ç¢ø §¿Ãò¨¾ ¦ºÄÅ¢ÎÅ¾¡ø ¯í¸û ÌÆó¨¾ ¦À¡Ð «È¢× ÁüÚõ ¯Ä¸ Å¢„Âí¸¨Ç ¦ÀÚÅ¾¡¸ ±ñÏ¸¢È£÷¸û			
5.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡ðÊÉ¡ø ¯í¸û ÌÆó¨¾Â¢ý ¿¼ò¨¾Â¢ø Á¡üÈõ ²üÀðÎ ¿ýÉ¼ò¨¾ ÁüÚõ ¾£Â ÀÆì¸í¸¨Ç ¦ÅÚò¾ø §À¡ýÈ Á¡üÈí¸û ²üÀðÎ ¯ûÇÐ.			
6.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ¯í¸û ÌÆó¨¾Â¢ý ÑýÉÈ ¢¨Å §ÁõÀÎò¾¢ ¯ûÇÐ.			
7.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý ÀÂýÀ¡Î ¯í¸û ÌÆó¨¾Â¢ý ÁÉ ¯Ú¾¢¨ÂÔõ, ¨¾Ã¢Âò¨¾Ôõ §ÁõÀÎò¾¢ ¯ûÇÐ.			
8.	¯í¸û ÌÆó¨¾Â¢ý àíÌõ §¿Ãò¾¢ø Á¡üÈõ ²üÀðÎûÇÐ			
9.	Á¢ýÉÛ º¡¾Éí¸Ç¢ø «¾¢¸ §¿Ãò¨¾ ¦ºÄÅ¢ÎÅ¾¡ø ¦ÅÇ ¢Åð¼ ¦¾¡¼÷Ò¸Ç¢ø §¿Ãò¨¾ ¦ºÄÅ¢¼ ÓÊÅ¾¢ø¨Ä			
10.	Á¢ýÉÛ º¡¾Éí¸Ç¢ý «¾¢¸Á¡É ÀÂýÀ¡ðÊÉ¡ø ¯í¸û ÌÆó¨¾ ¿ñÀ÷¸Ç¢¼Á¢ÕóÐ ¾É¢ôÀÎò¾ôÀÎ¸¢È¡÷			
11.	¦ºÂÄüÈ ¾ý¨ÁÂ¡Öõ, Á¢ýÉÛ º¡¾Éò¨¾ «¾¢¸õ º¡÷óÐ þÕôÀ¾¡Öõ ¯í¸û ÌÆó¨¾Â¢ý ¯¼ø ±¨¼Â¢ø Á¡üÈõ ²üÀÎ¸¢ÈÐ.			
12.	þÂ÷§À¡ý ÁüÚõ ¦†ð¦ºð ÀÂýÀÎòÐÅ¾¡ø ¯í¸û ÌÆó¨¾Â¢ý §¸ðÌõ ¾¢Èý À¡¾¢ì¸ôÀÎ¸¢ÈÐ.			
13.	¯í¸û ÌÆó¨¾ ¾¨ÄÅÄ¢ ÁüÚõ Áí¸Ä¡É À¡÷¨Å, ¸ ¢ð¼ôÀ÷¨Å, àÃôÀ¡÷¨Å §À¡ýÈ À¡÷¨Å Ì¨ÈÀ¡Î¸Ç¡ø À¡¾¢ì¸ôÀÎ¸¢È¡÷			